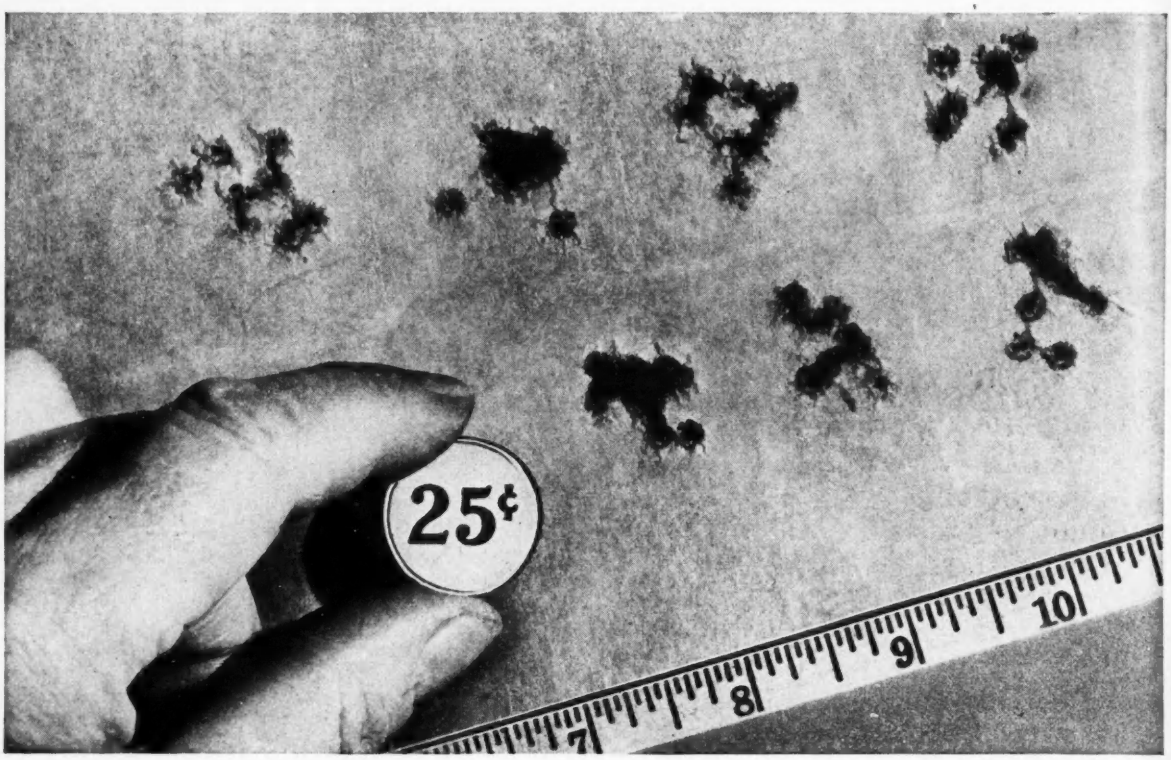
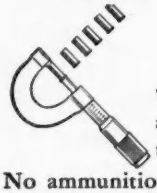
AMERICAN RIFLEMAN

CA. 8267 C-257 L.T. 11-16-37
BRUCE M. BURCHARD
RT. # 1, BOX 269
WALNUT CREEK, CALIF.



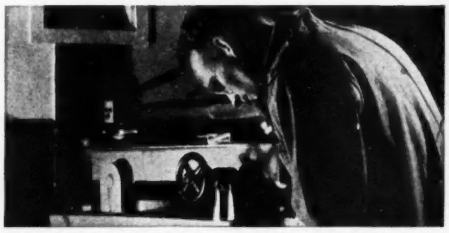
How tight can a group be at 100 yards?



WHEN your rifle, your aim and your squeeze are right, and conditions ideal, how tight can a group be? As tight as your ammunition can shoot!

No ammunition can put all bullets in one hole at 100 yards for a series of shots. But Peters technical men, by unceasing care in manufacture and testing, have found ways to make match cartridges as nearly *exactly alike* as modern "know-how" will permit. The result of this care can be seen in the photograph above, showing test groups shot from target rifles in machine-rest on Peters ballistics ranges at 100 yards. Many of these groups are no larger than a 25-cent piece. And all this means that when you load your target rifle with Peters Dewar Match or Peters Police Match 22's, you're assured all that modern manufacturing minds and machines can provide to help you make a "possible."

It pays to shoot Peters match ammunition. Ask for Peters Dewar Match and Police Match 22's or, for practice, Peters "Target" 22's. Made *by* experts, *for* experts, *there's no more accurate rim fire ammunition in the world!*

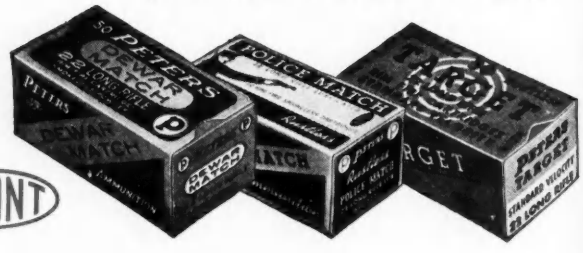


HE LOOKS FOR TROUBLE. Peters technician squeezes trigger of target rifle in machine-rest, testing accuracy of Peters match 22's. Samples from each lot must pass critical tests. Groups must fall within extremely rigid tolerances.

THE 'SCOPE TELLS THE STORY. Constant vigilance in manufacture and testing has made Peters renowned the world around for match cartridges with uniform accuracy for tight groups... "possibles"... more and more match "wins."

PETERS

PACKS THE POSSIBLES



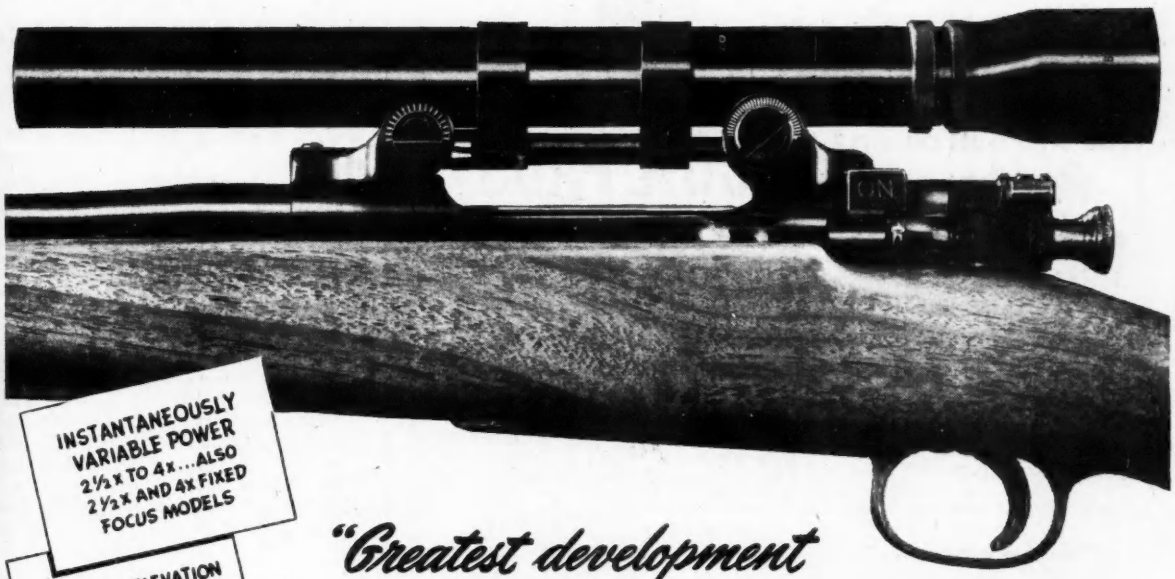
PETERS CARTRIDGE DIVISION — *Remington Arms Company, Inc., Bridgeport 2, Conn.—"Dewar Match" and "Target" are Reg. U.S. Pat. Off.—"Police Match" is a trademark of Peters Cartridge Division.*

DU PONT

New HUNTING SIGHT

by BAUSCH & LOMB

NOW BEING SHIPPED TO DEALERS IN LIMITED QUANTITIES



INSTANTANEOUSLY VARIABLE POWER 2½x TO 4x...ALSO 2½x AND 4x FIXED FOCUS MODELS

WINDAGE & ELEVATION IN MOUNT INSTEAD OF SCOPE!

EASY INSTALLATION ON MOST POPULAR BOLT-ACTION RIFLES

INSTANTLY REPLACEABLE WITH IRON SIGHT!

MOST RUGGED SCOPE EVER BUILT!

BAUSCH & LOMB QUALITY!

INSTANTLY DETACHABLE!

USE ONE SCOPE FOR ANY NUMBER OF RIFLES ...ZEROED WITHOUT READJUSTMENT

"Greatest development since the invention of the telescopic sight"

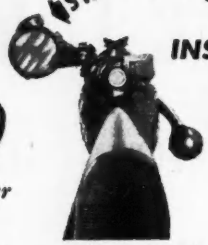
WRITE for complete descriptive literature and specifications. Bausch & Lomb Optical Company, 276-H Lomb Park, Rochester 2, New York

Pachmayr LO-SWING SCOPE MOUNT

MOUNTS LOW ON RECEIVER

$20 at your dealer

SWINGS TO SIDE INSTANTLY FOR USE OF IRON SIGHTS



Low . . . where a scope is easiest to use . . . *swing it* to side for instant use of iron sights when needed in bad weather. Precision made throughout . . . swings on hardened steel cones . . . unconditionally guaranteed. Fits all leading rifles.

FOR SHOTGUN OR RIFLE

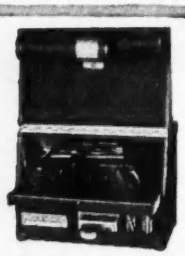
Pachmayr RECOIL PADS

Made of Neoprene . . . not affected by oil, solvent, water or weather. Scientifically designed for comfort and efficiency . . . Two sizes in red or brown. Field, Skeet and Trap Models. $3.25

Best by scientific and field test . . . Unconditionally Guaranteed. Rifle Butt Pads . . . $2.00

HAND-GUN CASE

Holds four hand-guns plus scope and accessories. Beautifully made, flock lined for full protection to guns. Compact and lightweight. $19.75



POWer-PAC SHOT CONTROL

Perfect Patterns . . . PACKED WITH POWER

The new POWer-PAC shot control variable choke attachment for single barrel shotguns gives truly amazing performance . . . perfect patterns at all ranges . . . packed with greater killing power . . . greater recoil reduction and elimination of annoying muzzle blast that hurts your ears.

$18.50

Complete with 3 tubes belt carrying case and wrench.
Factory Installation: $3.50

CLEAR SIGHT SCOPE CAPS

Neoprene caps with optically flat clear glass, stays on scope ready for use yet gives full protection. Guaranteed not to interfere with scope optics.

$2.95 *per pair*

PISTOL GRIP ADAPTER

Improve your hand-gun shooting by installing, in a few minutes, our well-known grip adapter. When ordering, specify gun to be installed on and we will send the *correct* size. $1.75

At Your Sporting Goods Dealer

PACHMAYR GUN WORKS

1220 SO. GRAND AVENUE • LOS ANGELES 15, CALIFORNIA

RIFLEMAN WORDS • • • •

Each month this 'lexicon for shooters' is devoted to a few words peculiar to the shooting game which may be puzzling to the newcomer.

BALLISTICS—The study of projectiles in flight and of the action of their propellants. Interior ballistics has to do with the explosion of the primer, the ignition and burning of the powder charge, the internal pressures and stresses set up by that burning, and the motions, stresses, strains and torques resulting as the bullet is forced through the bore. Exterior ballistics is the study of projectiles after they have left the bore of the arm in which they were fired.

BORE—The inside of the barrel of a firearm. Bore diameter is the distance between the tops of opposing rifling lands.

CALIBER—The diameter of the bore of a rifle or pistol, usually measured from the top of one land to the top of the opposing land, which is a means of expressing the diameter of the bore before the rifling grooves are cut. Caliber is usually expressed in decimal fractions of an inch, as .30 caliber, .45 caliber, etc.

CROSS BOLT—A rod or bar, moved at right angles to the axis of bore, which locks or adds strength to the locking of the closed breech. On some guns with a movable bolt, the cross bolt is also used to lock the bolt open. Cross bolts have been used for years in some designs of double-barrel break-action shotguns.

LANDS—The raised portion of rifling in a firearm's bore.

MUZZLE BRAKE—Also known as compensator. A device attached to the muzzle of a gun which is designed to deflect the propelling gases emerging from the muzzle behind the bullet and to utilize the energy of these gases to pull the gun forward to counter the recoil of the weapon. The location of the gas ports in the muzzle brake or compensator may also minimize muzzle flip or jump.

OGIVE—In ballistics, the radius of the nose curve of a bullet.

PINFIRE CARTRIDGE—An early form of cartridge in which a metal pin projects at right angles from the base. This pin, when struck by the hammer, drove into an internal primer and thus ignited the powder charge. Now obsolete.

SECTIONAL DENSITY—The weight in pounds of a bullet divided by the square of the diameter $\left(\frac{w}{d^2}\right)$. Sectional density divided by the coefficient of form is the ballistic coefficient, sometimes referred to as the carrying power of the bullet.

TRAJECTORY—The path described by a bullet from muzzle to target. Since gravity starts working on a projectile the instant it is free of the bore, a trajectory always forms a curve which increases as the bullet travels away from the firearm.

X-RING—An inner circle placed inside the bullseye of many targets. This inner circle makes it possible to decide tie scores without changing the total score. The highest value for a hit on a small-bore target is ten. Consequently the inner circle placed in these targets is designated an "X" (the Roman numeral ten).

KLEIN'S *YOUR GUN HEADQUARTERS*

Ithaca Model 37 Featherlight Repeater $83.50
All Gauges, Chokes and Barrel Lengths
Belgium Browning Automatic $108.80
12 or 16 Ga., All Chokes and Barrel Lengths
Add $12.50 for Raised Rib
L. C. Smith Field Grade Double $98.95
12, 16, 20 or 410 Gauges
New! Remington Streamlined Automatic $99.95
Choice of 3 Shot or 5 Shot
12, 16 or 20 Gauges
Marlin Model 90 Over & Under $82.45
All Gauges, Chokes and Barrel Lengths

There are good reasons for *Klein's Gun Leadership* — the same good reasons for you to buy your Gun at Klein's . . .

- √ You have the satisfaction of knowing you are buying at the *lowest possible price.*
- √ You are certain to obtain the gun you want from the *world's greatest selection of firearms.*
- √ You know every new gun is factory packed and is *guaranteed by both the factory and by Klein's.*
- √ You must be *satisfied with every purchase or your money will be refunded.*
- √ You have 4 *convenient ways to pay* for the gun(s) you want: (1) C.O.D., (2) Layaway, (3) Cash, or (4) Trade

TRADE

Your guns are worth more at Klein's! America's oldest and largest gun traders *GUARANTEE YOU THE HIGHEST TRADE-IN ALLOWANCE* or *CASH* PRICE for your guns ● Ship your gun today express collect or parcel post for appraisal ● Satisfaction guaranteed or your gun will be returned at once ● If you prefer, write us about your gun and whether you want a trade or cash.

KLEIN'S *has MORE new SHOTGUNS!*

Free! Extra 3-Shell Plug With Every Pump and Automatic Shotgun!

H & R Single Barrel, All Gauges, 26", 28" or 30"	$ 21.50
Stevens 22/410 or 410 Gauge Over and Under	$ 32.25
Stevens 124 Repeater, 12 Gauge, 28" Full	$ 32.45
Stevens 820 Pump, 12 Gauge, 28" Barrel, Full or Mod.	$ 53.95
Stevens 311 Double, All Gauges	$ 52.25
Stevens 620 Pump, All Gauges, 28" or 30" Full	$ 75.45
Winchester 24 Dbl., All Ga., 28" or 30" Mod. & Full	$ 68.95
Winchester 25 Pump, 12 Gauge, 28" Barrel, Hammerless	$ 72.85
Winchester 42 - 410 Gauge Pump, 28" Mod. or Full	$ 73.95
Winchester 12 Pump, All Gauges, 28" or 30" Full	$ 84.95
Winchester 42 - 410 Pump, Skeet Grade, Rib	$110.35
Winchester 12, Skeet Grade, Rib Barrel	$114.95
Winchester 12 Trap Gun, Rib, 12 Gauge, 30" Full	$118.95
Winchester 12 Skeet Gun, 12 Ga., 26" Brl., Vent. Rib	$185.00
Winchester 12 Trap Gun, 12 Ga., 30" Full, Vent. Rib	$190.00
Winchester 21 Double, Skeet or Trap, All Gauges	$276.50
Savage 720 Auto, 12 or 16 Gauge, 28" or 30" Barrel	$ 94.50
Savage 745, Light 12 Ga., All Brl. Lengths and Chokes	$ 99.85
Browning Belg., Light 12 or 16 Ga., All Chokes	$124.50
Browning Belg. Light 12 Ga., Rib., All Chokes	$137.00
Browning Over & Under, 12 or 20 Gauge, Raised Rib, Choice of Chokes & Barrel Lengths	$219.00
Browning, as above with Ventilated Rib	$244.00
Remington 31A or 31LA Pumps, All Gauges	$ 84.95
Remington 11 '48, 16 Gauge, 28" with Polychoke	$114.70
Remington "Sportsman" 16/28" Full, With Extra Barrel, 26" Improved Cylinder	$129.95
Remington "Sportsman" 16/28" Full with Extra 28" Modified Barrel, Both with Ventilated Ribs	$154.95
Mossberg 185D, 20 Gauge Repeater	$ 22.95
Fox Model B, Double Barrel, All Gauges	$ 62.50
Nydar Shotgun Sight, $19.95 Value	$ 9.95

Ithaca Special!

Your choice of Pachmayr or White Line Recoil Pads custom fitted on any Ithaca Shotgun **$3.95**

State desired overall stock length including recoil pad and choice of Skeet, Speed or Regular style recoil pad.

37 Pump, All Gauges, Barrel Lengths & Chokes	$ 83.50
37R Pump, Rib, All Gauges and Barrel Lengths	$ 98.50
37S Pump, Vent. Rib, All Gauges and Barrel Lengths	$160.63
37T Pump, Vent. Rib, All Gauges and Barrel Lengths	$187.39

Bargain Offer!

$2.75 VALUE FOR $1.00

$1.00 Refundable with 1st Purchase

You Get This THE GUN DIGEST OR FISHING DIGEST

1 — The GUN DIGEST. World's Greatest Gun Book. 184 Pages . . . 650 Illustrations of guns, etc. The only authentic gun buyer's guide to American and Foreign rifles, shotguns, handguns and accessories. A $1.50 Book Everywhere! Or—
FISHING DIGEST. 138 Pages . . . 785 Illustrations of rods, reels, etc. The complete guide on what tackle to buy and how to use it. A $1.50 Book Everywhere!

and You Get This KLEIN'S SPORTS CATALOG

2 — KLEIN'S SPORTS CATALOG. Loaded with bargains in fishing, hunting, and camping equipment. Big list of New and Used guns at lowest prices anywhere. Also Gun Trading Dope! Latest Edition.

and You Get This MERCHANDISE CERTIFICATE

3 — MERCHANDISE CERTIFICATE. Worth $1.00 on any purchase of $10.00 or more from KLEIN'S SPORTING GOODS.

YOU GET ALL 3 FOR ONLY $1.00!

Simply clip $1.00 to this ad. Enclose in envelope and mail. By return mail you will get Klein's Bargain Catalog, your choice of ☐ Gun Digest or ☐ Tackle Digest and the $1.00 Merchandise Certificate.

YOU GET YOUR DOLLAR BACK WITH YOUR FIRST ORDER OF $10.00 OR MORE!

KLEIN'S *has MORE new HANDGUNS!*

HAVE THE FINEST!

S & W "Masterpiece" Target Revolvers

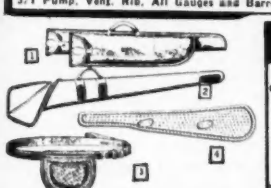
Dependable, rugged, accurate. A favorite with shooters who want the best. Features rib barrel, high speed hammer, micrometer click adjustable target sights. Checkered Circassian walnut grips. 6 shot, 6" barrel. K-22 shoots 22 Short, Long, or Long Rifle cartridges; K-32 shoots 32 S&W Short or Long cartridges, and K-38 shoots 38 Special Service & Target Loads. State choice $65.00

S&W "357" Mag. 6 Shot, 3½", 5", 6", 6½", 8⅜", Bl.	$100.00
S&W 32 Hand Ejector, 32 S&W Long Caliber 6 Shot, Round Butt . 3¼" or 4" Barrel, Blued	$ 81.25
S&W Reg. Pol. 32 Cal. . 3½" or 6". Blue	$ 64.50
S&W M&P 38 Special, . 4", 5" or 6" Barrel	$ 58.50
Colt Officers Model, 38 or 22 Caliber Target Revolver, 6" Barrel, Adjustable Sights	$ 75.00
Hi Standard C: 380 Auto: 3" Barrel	$ 55.00
Hi Standard GD, 22 Auto, 4½" or 6¾" Barrel	$ 60.00
Hi Standard G-E: 22 Auto, 4½" or 6¾" Barrel	$ 68.00
H&R Defender Spec., 38 S&W Cal. 4" Brl. Blue	$ 44.95
H&R Starter Revolver; 22 Blanks, 5 or 9 Shot	$ 22.67
Iver Johnson 22 Target Revolver, 6" Barrel	$ 37.75
H&R 922—Chrome Plated Revolver, 22 Caliber	$ 26.75
H&R 38 Caliber "Defender" 4" Barrel	$ 44.95
Hi-Standard H-B Auto, 4½" or 6¾" Barrel	$ 42.15
Hi-Standard H D - M Auto, 22 Caliber, 4½" or 6¾"	$ 55.00
Colt 38 Super or 45 Auto Pistol	$ 65.00
Colt 22 Conversion Unit for Above	$ 65.00
Colt 32 Caliber Police Positive, 4" Blue Barrel	$ 65.00
Colt Official Police, 22 or 38 Special, 6" Blue	$ 65.00
Colt "Woodsman Target" 6" Auto, 22 Caliber	$ 78.00
Colt "Woodsman—Match Target" Auto, 22 Caliber	$ 85.00

about Poly-Choke "extras"

Nobody, we repeat NOBODY, will put more "Extras" into your Poly-Choke installation than Klein's. And more important — Klein's Installation, as well as "Extras" are a tribute to master gunsmithing. Let America's Largest Gun House do the perfect job. Write for free Poly-Choke Handbook and free shipping carton. Price includes parcel post charges both ways in U. S. 2 Day Service!

1330—Standard Poly-Choke	**$14.75**
1332—New Ventilated Poly Choke (Illus.)	**$18.75**



ACCESSORY SAVINGS!

1. **Red Head Canvas Take-down Case.** Strong brown duck lined with flannel. Canvas bound. Leather handle and trimmings. State barrel length. For automatic shotguns and take-down rifles . . . $1.98; for double barrel or pop guns . . . $1.49
2. **Sheeplined Gun Case.** Save $3.41! Tough, heavy canvas finished plastic. Pull length zipper. Cowhide tip and handle. Heavy shearling lined throughout. State overall length desired . . . $7.39
3. **Red Head Shell Pouch.** Beautifully embossed red wood leather 1" leather belt with roller buckle. Special . . . $2.59
4. **Saddle Leather Scabbard.** Oak tanned waxed thread stitched "A" carrying straps. Basket design on outer side . . . $7.95

KLEIN'S *has MORE new RIFLES!*

$1.89
SLING & SWIVELS FOR ANY 22 CALIBER RIFLE!
STEVENS No. 322 or No. 325
$42.95
No. 322 - 22 Hornet, 5 Shot, Bolt Action
No. 325 - 30/30, 4 Shot, Bolt Action
MARLIN No. 336 SC
$61.45
30/30 or 32 Special Sporting Carbine
6 Shot, Lever Action
WINCHESTER No. 63
$63.50
22 Long Rifle, 10 Shot Automatic
Weaver G4 Scope Furnished and Installed on Any 22 Rifle
$10.75

Savage 219 .30/30 Single Shot, Auto. Ejector	$ 28.80
Savage 325, 30/30 Clip Repeater, 4 Shot	$ 42.95
Sale! Remodeled 30.06 Enfield Sporter	$ 59.95
Winchester 94, 30/30 or 25/35 Caliber Carbine	$ 62.45
Remington 721, .270 or 30.06, 5 Shot	$ 79.95
Husqvarna Swedish Sporter, 270 or 30.06 Cal.	$129.95
FN Mauser 270 or 30/06 Custom Sporter	$186.50
$15.00 Johnson Indoor BB Target Gun	$ 4.95
Mossberg 142, 7 Shot Ball Repeater, 22 Cal.	$ 21.95
Martin 80DL, Repeater, 22 Short, Long & LR	$ 24.15
Mossberg 152 Auto, 22 Caliber Carbine	$ 26.95
Martin 81DL, Bolt Action Repeater, 22 Cal.	$ 28.90
Mossberg 151M Automatic, 15 Shot, 22 L.R.	$ 30.90
Martin 88C, 15 Shot, 22 Automatic	$ 32.50
Remington 550, Auto, 22 Short, Long or LR	$ 34.95
Remington 521TL, Bolt Action, 22 Target	$ 38.95
Winchester 62 Pump, 22 Short, Long and L.R.	$ 42.95
Remington 121 Pump, 22 Short, Long and LR	$ 49.95
Remington 241 Auto, 22 Long Rifle, 10 Shot	$ 63.50
Winchester 52HB, 22 Caliber Target Sights	$ 89.50
Stevens 87 Automatic, 22 Caliber	$ 29.95
Savage 29, Hammerless Pump Repeater	$ 42.95

SCOPES!

COMP LINE. WRITE FOR INSTALLATION COST. ALL STD. MOUNTS.

Weaver K-2.5, Cross-hair reticule	$22.50
Weaver K-2.5, Cross-hair reticule	$37.50
Weaver K 4, 4 Power	$45.00
Weaver K 6, 6 Power	$48.50
Mossberg Riflescopes, 4 Power	$ 9.95
Bausch & Lomb 60mm Spot Scope	$98.00
Mossberg Model A Spotshot	$24.90
Lyman Junior Target Spot 6X	$62.50
Lyman "Alaskan", 2½ Power	$60.00

SAVE 33⅓%!

Quality - Features - Price make this your best hunting clothing buy. Heavy 11 oz. Army duck with all around let down blood-proof game pocket—front and back entrances; bi-swing back; hand warmer pockets; utility shell pockets plus shell loops under flaps. Coat. Sizes 36 to 48 . . . $6.98

Matching Pants — Same heavy duty Army duck, double lined seat. Roomy front and back pockets. Choice of straight style or Zouve (Knit Bottom). State Size . . . $5.98

Matching Cap . . . Solid red when reversed . . . $1.39

Gunslick Cleaning Kit. Contains: Duralumin cleaning rod, 3 sections in case, 1 slotted 1 jagged tip; brushes, solvent; gun grease; gun oil; cleaning patches, and lubricant. State gauge or caliber . . . $2.15

KLEIN'S *has MORE new AIR GUNS!*

4. **Hy-Score Air Pistol.** No cocking—simply break open between shots. Available in 177 or 22 caliber for pellets and darts or may be had in standard BB gun. State choice
   Single Shot. Blue Finish Walnut Grips . . . $19.85
   6 Shot Repeater. Blue Finish Walnut Grips . . . $24.95
2. **Crosman Town and Country Jr.** Sturdy Single shot bolt action Air Rifle. Shoots 177 or 22 caliber pellets. State choice! . . . $14.95
3. **Marksman Air Pistol.** Looks and Feels like U. S. Army 45 Auto. Accurate and Powerful. Shoots 177 caliber pellets, darts and BB's. Generous supply included. **Specially Priced** . . . $ 4.95
4. **Sheridan "Sporter"** Highest quality workmanship and materials of any air rifle. Features power, accuracy, balance and beauty. Single shot 5mm. caliber . . . $35.00
5. **Crosman Air Pistol.** Powerful, silent and accurate. Single shot. Shoots 177 or 22 cal. pellets (state choice). Checkered tenite grips . . . $16.95

177 Caliber Pellets, Box of 500	$1.50
22 Caliber Pellets, Box of 500	$1.85
5 MM Caliber Pellets, Box of 500	$2.00
Darts: 177 Cal.	49¢ Doz.

KLEIN'S *Sporting Goods*

SINCE 1899

227 WEST WASHINGTON ST. CHICAGO 6, ILL.

Real Bargains in Used Guns. From Klein's Huge Stock. Every Used Gun Has Same Guarantee As New Gun. Send $1.00 for Gun Digest and Catalog With Big List of Used Guns Or Write Mfr. Klein For the Gun You Want (new and used).

UNCONDITIONAL MONEY-BACK GUARANTEE ON EVERY PURCHASE

Rush me . . . Size . . . Dept. 3-S
(Use bottom of page or separate sheet for additional items. Your Name and Address)

☐ Enclosed is $ . . . for payment in full.
☐ Ship C.O.D. Enclosed is $ . . . (20% deposit required).
☐ I am shipping my guns for Trade or Cash as explained in the attached letter.
☐ Hold for me in Layaway. Enclosed is $ . . . (10% deposit required). I will pay balance in installments of $5.00 or more monthly.

IMPORTANT NOTICE to PURCHASERS of FIREARMS or AMMUNITION

Kindly sign the following statement: "I am not an Alien, and I have never been convicted of a crime of violence, nor am I under indictment or a fugitive from justice."

SIGNATURE . . . OCC . . . AGE . . .

Look For The Name

"WHITE LINE"

None Equal Regardless of Price

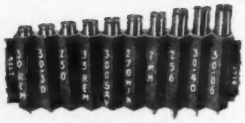
DeLuxe "White Line" Recoil Absorber—A brand new principle of recoil absorption in the world's finest recoil absorber. Large and small sizes Red, brown and black colors. Skeet, Speed and Regular styles . . **Only $3.50 Ea.**

The Original "White Line" Recoil Absorber—For shotguns and rifles. Used and recommended by expert shooters everywhere Skeet, Speed or Regular styles in jet black, walnut brown or tile red colors. . . . . **Only $3.25 Ea.**

"White Line" No-Slip Butt Plate

Transverse sawtooth gripping surface holds rifle to shoulder regardless of shooting position. Three sizes—a size for every rifle. Indispensable for all target shooters Jet black, walnut brown, or tile red colors. Utmost quality at **Only $2.00 Ea.**

"White Line" Butt Extension Spacer—One or more installed between gunstock and recoil absorber or butt plate lengthens gunstock and beautifies gun. Two sizes: large (5½" long) small (5" long) . . . . . **Only $ .75 Ea.**



"Sure Grip" Shell Pack—Made of pliable durable rubber Fits any ordinary belt up to 2" wide Holds any 10 shells from 25 to 35 caliber securely, but instantly available Prevents loss of ammunition Jet black, walnut brown, or tile red colors . . . . **Only $1.95 Ea.**

These are only a few of scores of Mershon necessities for hunters, target shooters and outdoorsmen All are absolutely guaranteed to give complete satisfaction or money back. *Ask for and look for the "White Line"* It is your assurance of utmost in quality, value and satisfactory service. See your dealer or gunsmith. *Canadian representatives—Scope Sales Company, Ottawa, Ontario*

MERSHON COMPANY, Inc.
Exclusive Manufacturers of
"WHITE LINE" PRODUCTS Since 1935
511 East Broadway • Glendale 5, Calif.

Ricochets . . .

"HUNTED HUNTERS"

Brooklyn, N. Y.

Editor:

I consider the article "Hunted Hunters," June, one of the most important articles to appear in THE RIFLEMAN in some time.

The importance of the situation in the U. S. today is, I'm afraid, not given enough stress —even in THE RIFLEMAN. The seriousness of the growing antifirearms feeling in most states should be given the greatest weight, over all other material in each RIFLEMAN. Unfortunately, I truly believe that many NRA members do not bother to write to their state representatives in reference to firearms legislation and conservation law changes which affect the use of arms. The all-too-prevelant feeling is "my single letter won't matter one way or the other."

A few more articles like "Hunted Hunters" —far more stress on the legislative problem, in the early part of each year—and, if possible, examples of what might happen in a state, should certain poorly designed firearms laws pass, would do a great deal in furthering the aims and the hopes of the Association and its members.

ARNOLD HAYNE

Spokane, Washington

Editor:

Compliment Al Look for "Hunted Hunters." This type of article should help preserve our wonderful privilege of hunting!

KEITH MALONE

Blaine, Washington

Editor:

The article by Mr. Al Look is one to make the American hunter sit back and take another look at his hole card. A few more debacles such as the Colorado Case and the hunter will find himself a hunter with no place to hunt. Also, a number of Game Commissions will be non-existent.

This Colorado thing was badly mismanaged but that doesn't alter the fact that some means must be found to separate the hunter from the non-hunter, to educate him in the proper handling of firearms and the identification of game animals mixed with practical demonstration of sportsmanlike conduct. Also a mandatory charge of manslaughter should be preferred against any hunter who shoots and kills another human being, and his right to hunt should be permanently revoked. Failing this, the game fields will eventually be turned over to the stockmen who have been grabbing for them these many years.

STANLEY A. BOYER

Denver, Colorado

Editor:

The June RIFLEMAN contains an article by Al Look entitled "Hunted Hunters".

This article, largely through implication, is in many respects misleading. Instead of promoting good game management, it is our belief it will retard it. Certainly there is need for educational work among the hunters to foster the principles of true sportsmanship, but we doubt that sensationalism of this type is the way to bring it about.

The Colorado Game and Fish Commission faced a serious problem of severe overstocking by deer; populations were so high that any hope for perpetuation of a winter deer range lay in substantial herd reductions. Our concern has been to keep the National Forests as productive of game as possible, consistent with their other values, and the Commission's regulations permitting a bag limit of two deer had the full support of the Forest Service. The moderate reduction accomplished was far from slaughter; in an area so densely timbered and brush-covered that would be impossible.

The article implies that National Forest and Grazing District lands were formerly taxed, which is not the case. With minor exceptions they consist of reserved public lands that were never on the tax rolls. In lieu of taxes, twenty-five percent of the gross receipts from the National Forests are turned over to the counties, and, in addition, ten percent is expended on the area for roads and trails.

In the interest of good game management and the conservation of Forest resources upon which the game is dependent, I feel that the facts should be made known to your readers.

E. D. SANDVIG,
Acting Regional Forester

RELOAD ARTICLES

Napa, California

Editor:

Among the many services offered the shooter by THE AMERICAN RIFLEMAN, the series of articles on reloading is one of the best and most valuable. Here for the first time in years is some first-line, authentic dope on the reloading of modern and popular cartridges. I mean—*authentic!*

Every careful reloader knows that there has been entirely too much catch-as-catch-can, and b'guess and b'gosh, maybe-yes maybe-no guff on various loads circulating around of late. Some character pours in a definite overload of powder, happens to hit on a lucky combination of stout cases, stout gun, etc. which happens to hold together, then forthwith breaks in print, recommending the load to all and sundry. The load is way over maximum, definitely unsafe. But he happened to get away with it, so it's a good load. Some other Joe, who hasn't stopped to figure out the possible answers, takes the load on the first guy's sayso, bumps into a soft case, a minimum chamber or oversize bullet and promptly blows up his gun and maybe himself. The first character gets his velocity and pressure figures by estimating. Simple as hell, ain't it?

Even some of the most popular and widely accepted tomes on reloading and loads are made up in part by some of these maybe, maybe not figures. Reloading books are crammed full of virtually useless dope, based on powders that are in large part obsolete and off the market. Some of the figures frankly contradict themselves, others go against all logic and common sense. One of the finest powders ever offered the handloader, DuPont 4350, is hardly mentioned in some books, while in others the dope is scanty and apparently based largely on guess.

A really shrewd handloader can get some idea of pressures by the degree of primer flattening. But this is risky business at best

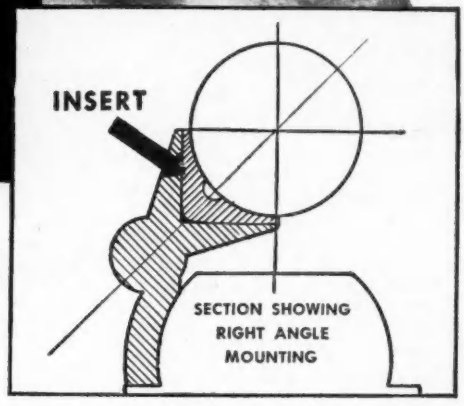
U. S. Pat. No. 2,470,282. Other
U. S. and For. Pats. Pending.

Only the new

MYKROM

TELESCOPE MOUNT

has right angle mounting



Right Angle Mounting assures *rapid, accurate, permanent alignment* of scope with rifle bore. Adjustments for zero are made in the mount—*not in the scope*

Lightweight inserts cushion the scope in Right Angle V-blocks, made of drop-forged steel. Original variations from zero are corrected by .003″ stainless steel shims (furnished with each mount) placed between the inserts and the V-blocks. With the tempered steel Clip-On Band cinched down, the scope is smack dab on zero for keeps, ready for the heaviest recoil and the roughest service, with the aiming point in the *center of the lens.*

And with the Clip-On Band, it is *now* unnecessary to remove the sealed objective or eyepiece housings, or to alter the precision factory adjustments of a fine telescopic instrument.

See the new MYKROM Mount at your gunsmith's or sporting goods dealer, or write to the MYKROM Company, 1335B S.W. Morrison St., Portland 5, Ore., an affiliate of Baker-Barkon Co.

Write today for free Specification Sheet and Illustrated Circular

Other Exclusive MYKROM Features

THE NEW AND REVOLUTIONARY INTER-PLANE LOCK

Instant, automatic zero replacement.

STEEL FORGINGS

Drop-forged of steel with highest impact and structural strength. Weighs less than 6 ounces. Blued to match the finest rifles.

No Cams • No Springs • No Lugs • No Levers
No Tools

MYKROM TELESCOPE MOUNT

T. M. REG. U. S. PAT. OFF.

DAVIDSON MARK 245
Selective-POWER
SPOTTING SCOPE

★ 45 degree angle eyepiece
★ Selective power
★ Telefocus-prismatic system
★ Eye-free focusing ring
★ Long eye-relief
★ All optics coated
★ Weather and moisture proof

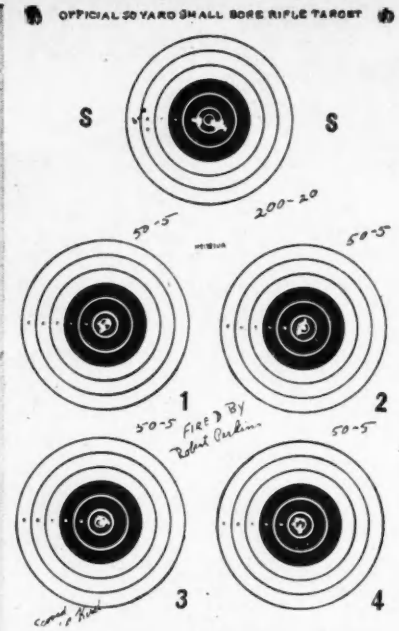
40X 30X 25X 20X 15X

Scope may be purchased with any power eyepiece. Extra eyepieces may be purchased separately.

I used the Mark 245 Spotting Scope at the California State Championship Matches in Fresno, and the Pacific Coast Championship Matches in Los Angeles.

The Mark 245 is the finest, most versatile Spotting Scope I have ever used.

Robert E. Perkins



Robert E. Perkins Calif. State Small bore champion, 1949. Pacific Coast champion New World's course record, 1949.

WRITE FOR FREE ILLUSTRATED LITERATURE AND SPECIAL OFFER

DAVIDSON MANUFACTURING COMPANY
5146 Alhambra Ave., Los Angeles 32, Calif., U. S. A.

LITHOGRAPHED
OFFICIAL N.R.A. Targets
RIFLE AND PISTOL

N. R. A. SEAL — SEND FOR — FREE Illustrated Price List

You might just as well test your rifle by shooting at tin cans as at unofficial inaccurate targets. OFFICIAL Targets are uniformly accurate, assuring you of scores that are true and which will be recognized by the National Rifle Association. Yet you pay no more.

NATIONAL TARGET COMPANY, INC. 1255 25th St., N.W., WASH., D. C.

and not always a true indication. For instance, a pet squib load of mine in the .270, namely 8½ grains of Unique behind the 109-grain Loverin cast gas-check bullet, shows a greater degree of primer flattening than does 52 grains of 4350 behind the 150-grain Speer bullet, a stiff load but a below maximum one. Obviously there is no comparison in the actual pressures of the two loads—the true story lies in the powders, the type they are and the way they burn.

So now the RIFLEMAN is giving us some real, up-to-date data with up-to-date components *actually* chronographed properly for velocities and tested for pressures. This is the real thing and something badly needed by the hand-loading clan. Personally speaking, I wouldn't trade any of my copies of the RIFLEMAN containing this dope, for several big round dollars.

Congratulations!

BILL MCCANDLASS

PASS THE RIFLEMAN!

Park Ridge, Illinois

Editor:

I recently attended a meeting of the board of directors of the Officers' Club of my station. Among the items of business considered was that of magazine subscriptions for the reading room. Upwards of thirty magazines were on the recommended list. I looked over the list to see if THE AMERICAN RIFLEMAN was included. It was not. So I added it to the list, and persuaded the other directors to include it, so that the official publication of my favorite sport may be available to the members of my club.

Having previously donated RIFLEMAN subscriptions to the Officers' Club and the Non-Commissioned Officers' Club of my last command, the 59th Air Depot, I now perceive that the idea of increasing the circulation of the RIFLEMAN has been kicking around in my head, at least subconsciously, for some time. Considering the aims of our Association, maybe the regular staff could use a little help from the rank and file of NRA members, who certainly are dedicated to the furtherance of those aims.

One of the vital functions of the National Rifle Association, in the process of "making America once again a nation of Riflemen," is to keep us aware of the ever-present danger to our freedom inherent in anti-gun legislation. To this end, the Association's Executive Director, C. B. Lister, dedicates many of his monthly editorials.

If you have read those editorials for the last twenty-odd years, you are familar with the threat, and with what gun lovers ought to do about it. How many more people know what you know about the problem? There are about 300,000 regular subscribers, so we may assume that some 700,000 people see each issue. That's not enough.

Out of 140,000,000 people in this country, a little over half a million is only a drop in the bucket. If our Association is to exert influence in opposition to harmful legislation, it will need to present our point of view to more people. As riflemen who are aware of the harm that can be done by restrictive gun legislation, and as loyal Americans to whom freedom is our most fundamental shibboleth, it is incumbent upon us to assume our share of the burden of spreading the word around.

There are many ways in which YOU can help. For example, when you have finished

FIRST POST-WAR EDITION!

Large, Fully Illustrated Latest Models and Prices Sane, Conservative Advice

An outstanding Handbook and Gun Catalogue Providing a Safe Guide for your Purchases Plus Unbiased Information on Post-War Shooting Equipment

FOR an inexpensive short cut to more shooting satisfaction, order Colonel Whelen's new Gun Handbook and Catalog right away. It's crammed full of timely information covering all types of guns and post war equipment for hunters and shooters . . . a helpful guide to better buying whenever you are in the market for a gun, camera or shooting equipment!

As gun editor of Sports Afield and author of various popular books on hunting and shooting subjects, Colonel Whelen is one of America's best known authorities in this field. If you are not already familiar with the Colonel's concise writing style, you'll especially like his informal discussions of post war shooting equipment, so clearly presented in this new Handbook. All 186 pages are easy to read—Easy to understand.

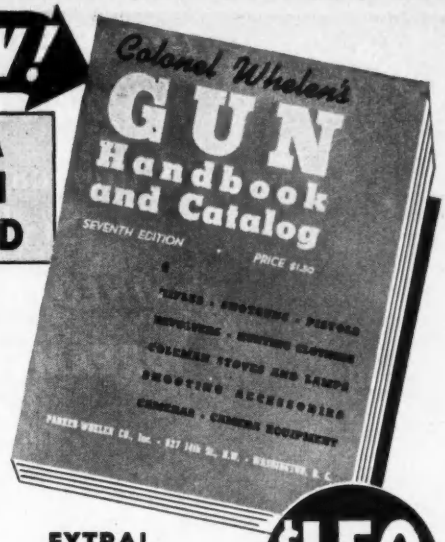
186 Pages (Same Size as this Page) Picture and Describe Hundreds of Items Useful to the Shooter

What rifle do you need for big game, for varmints, or for target shooting? What kind of scope, spotting glass or binocular? What is the winning small bore equipment? What kind of shotgun will serve your particular purpose best? How about loads, gauge, stock and choke? What revolver or pistol? Authoritative articles answer all of these and hundreds of other questions. The chapter on Cameras and Photographic Equipment contains useful information for beginners and experienced camera fans alike.

CAMERA SECTION INCLUDED

CONTENTS

		Page
Time Payment Plan		2
Foreword		3
Section I.	Small Bore (.22 caliber) Rifles	4
Section II.	Big Game and Varmint Rifles	23
Section III.	Shotguns	41
Section IV.	Revolvers & Pistols	66
Section V.	Rifle Sights, Telescope Sights, Spotting Scopes, Binoculars	78
Section VI.	Miscellaneous Equipment for Shooters ... Indispensable Books for Shooters and Sportsmen	104 113
Section VII.	Ammunition	115
Section VIII.	Cameras and Photographic Equipment.. Appendix, Helpful Articles, Information and Tables .... Time Payment Order Blanks—end of Handbook	123 150



EXTRA!

HANDBOOK HAS CERTIFICATE WORTH $1.50 ON PURCHASE OF $10 OR MORE

$1.50 POSTPAID

EASY PAY PLAN
25% WITH ORDER
BALANCE IN FIVE MONTHLY PAYMENTS

COMBINATION OFFER

Handbook sent FREE with any purchase of the items below.

RIFLES & SHOTGUNS

Remington Model 721 Rifle, .30-06 and .270 Caliber	$ 79.95
Marlin Model 336 Carbine, .30/.30 or .32 Special Caliber	61.45
Winchester Model 75 Sporting Rifle with Lyman Sights	55.50
Same, Open Rear Sight	49.40
Stevens Model 325, .30/.30 caliber, bolt action Carbine	42.95
Stevens .22/410 over and under gun	32.25
Remington Model 31TC Trap Gun, 12 gauge, with Ventilated Rib..	178.50
Ithaca Model 37 Shotgun 12, 16 or 20 gauge. Plain Barrel	83.50
Winchester Model 21 Double Barrel Shotgun 12 gauge skeet grade ..	276.50
L. C. Smith double barrel Shotgun, field grade	98.95
Ideal grade	137.15
Remington Junior Special Model 521 .22 Caliber Target Rifle with Lyman sights	36.95
Remington Model 513 TR Target Rifle complete with Redfield Sights and Govt. Type sling....	57.00
Same without sights	41.95
Remington Model 37 Target Rifle with Redfield sights	118.60
Same without sights	99.45
Winchester Model 75 Target Rifle complete with Redfield Sights and Govt. Type Sling	57.00
Model 75, as above, less sights..	41.95
Winchester Model 52 Target Rifle, Standard weight without sights	86.35
Model 52 Standard weight with Redfield sights	111.95
Model 52 HB without sights	96.85
Model 52 HB with Lyman sights ..	119.50
Model 52 HB with Vaver Sights ..	127.25
Model 52 HB with Redfield Olympic sights	131.25
Belgian Browning Automatic Shotgun Light 12 without Rib	124.50
Extra for Raised Matted Rib	12.50

PISTOLS & REVOLVERS

New High Standard Model G-D .22 cal., 4½ or 6¾" Barrel, Plain Grip	60.00
with Thumb Rest Grip	65.00
High Standard Model G-E .22 cal., 4½ or 6¾" Barrel, Thumb Rest Grips Only	68.00
High Standard Model G-B .22 Cal. 4½ or 6¾" barrel	50.00
High Standard .22 Caliber Automatic Model HD-M, 4½ & 6¾ inch Barrel, Plain Grip	55.00
With Thumb Rest Grip	60.00
High Standard Model G .380 Caliber Automatic 5 inch Barrel	55.00
Colt Official Police Revolver .22 cal. or .38 cal.	65.00
Colt Police Positive Special Revolver, .38 Special, .38 Police Positive or .32 Police Positive..	65.00
Colt Detective Special Revolver .38 Special .38 Police Positive or .32 Police Positive caliber	65.00
Colt Officers Model Target Revolver, .38 Special or .22 Cal.	75.00
Colt Super .38 Automatic Pistol ...	65.00
Colt Government Model .45 Automatic Pistol	65.00
Colt .22 Conversion Unit for .45 and Super .38 Automatics	40.00
Colt Sport Model Woodsman Pistol	60.00
Colt Target Model Woodsman Pistol	70.00
Colt Match Target Woodsman Pistol	85.00
Smith & Wesson K-22 Revolver..	65.00
Smith & Wesson K-38 Revolver..	65.00
Smith & Wesson Military & Police Revolver 2, 4, 5 & 6" Bbl., .38 Caliber, Square Butt	56.50

BINOCULARS

(Prices shown include tax)

Bausch & Lomb Zephyr Light Hard Coated Lens	
6 x 30	186.00
7 x 35	186.00
8 x 30	204.00
9 x 35	204.00
7 x 50 (not Zephyr Light)	210.00
Kollmorgen "De Luxe" Monette Monocular	49.50
Suède Case for above	1.75
Ray Ban Shooting Glasses	13.75

HUNTING SCOPES

Unertl Hawk, 4 power	52.00
Weaver K2.5, 2½ power	37.50
Weaver K4, 4 power	45.00
Weaver K6, 6 power	48.50
Weaver J2.5, 2½ power	22.50
Weaver J4, 4 power	27.50
Weaver G4, 4 power	9.75
Weaver G6, 6 power	12.50
Lyman Alaskan 2½ power	60.00
Lyman Challenger, 4 power	85.00

Stith, King-Pike and Redfield Mounts available

SPOTTING SCOPES

Bausch & Lomb Prismatic Spotting Scope 60 mm Objective, 20X	95.00
Argus Super Spotting Scope	74.50
Freeland All-Angle Stand	11.50
Mossberg Spotshot	24.90
Mossberg Stand	11.90

TARGET SCOPES

Unertl Varmint Scope, 6, 8 & 10X	75.00
Unertl Target Scope, 1 inch objective, 8 & 10 power	58.00
Unertl Target Scope, 1½ inch objective, 10, 14 and 20 power....	90.00
Unertl Target Scope, 2 inch objective, 10, 15 and 20 power..	125.00
Litschert Spot Shot Target Scope, 1¼-inch Objective Lens, 10, 12, 15 & 20 power with Dust Caps and Recoil Spring	49.95
Fecker Target Scope, 1⅝ inch objective, 10, 16, 20 & 24 power..	98.50
Fecker "Woodchucker" Scope, 1.2 inch objective 4.5, 5.5 & 7 power	62.50

PARKER-WHELEN CO., INC. 827 14th St., N.W. · WASHINGTON, D. C.

"The Mart" is designed especially for the American Gunlover. Its 300 pages are crammed with all illustrations of everything gunlovers could dream of: Power tools, Drills and taps, Hand Tools, carving tools, reamers and chisels, plastics and shellacs.....Outdoor books, gun books, technical books... 50 pages of profusely illustrated gun care..scopes and sights ..Slings and holsters...plus a glossary of all the guns being made today with a picture of each.
INDEED a dream book deluxe, yet a practical source of supply for all those hard to get items and many more.
Available for immediate delivery. Price only $1.50 postpaid
(No C.O.D.s)

Brownell Industries, Inc.
Montezuma, Iowa

More lathe - - -
More "under the hood"

SHELDON

Not only in appearance, capacity and features but in basic inherent qualities the SHELDON TS56B is far ahead of others in its price class. It is the only moderate priced lathe with "Zero Precision" (Timken very finest) Tapec Roller Bearings; with double v-belts to the spindle, with double below-the-bed countershaft drive, full double-walled apron, full quick change gears, 11¼" swing, heavy 56" bed with ways held to .0005" alignment.

WRITE FOR CATALOG

SHELDON MACHINE CO. Inc.
Manufacturer's of Sheldon Precision Lathes - Milling Machines - Shapers
4243 N. KNOX AVENUE - CHICAGO 41, ILLINOIS, U.S.A.

with your RIFLEMAN, let two or three others read it, too. If you are a member of the Armed Forces, check and see that the RIFLEMAN is available in the reading rooms of the various clubs at your station. If you are a civilian, see that it gets into clubs which you frequent. Send some gift subscriptions to the clubs that don't have it, and individuals, too.

The danger of antigun laws is not the only reason for you to share your RIFLEMAN. Think of the many services rendered by the Association; how about the interesting articles on shooting, hunting, gunsmithing, and the like. You enjoy reading it every month. So will your friends. Give them a chance to enjoy it with you by passing it around.

COL. CHARLES F. DENSFORD

TROUBLES IN NORWAY

Oslo, Norway

Editor:

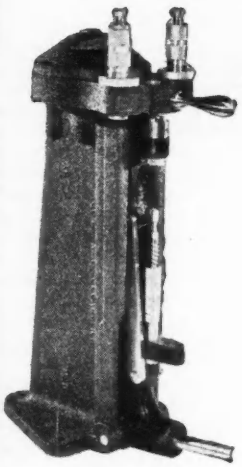
If my subscription to THE AMERICAN RIFLEMAN really makes me an active member of the NRA, I would like to tell you that I am very proud of this fact, although I, being a Norwegian citizen, do not think I can do very much to help you in keeping the antigun laws away from your country. I certainly wish I could. Here in Norway a man who wants to collect guns has to deal with much the same difficulties that he would have had if he had tried the same thing during the German occupation. Although we have no Norwegian law forbidding a man to collect guns, it is very difficult to get the necessary permissions to buy anything. During the occupation a man certainly would have been made about one headweight lighter if the Germans knew that he possessed a gun, but even today, a Norwegian who owns an unregistered firearm, or a weapon formerly owned by the Germans, is expected to pay to the government not less than 50,000 crowns—that is about 10,000 dollars, or as much as a Norwegian worker earns in 12-14 years. Well, no one can hide a sad smile when reading about this "law,"—it looks foolish, and, really *is* foolish too,—but our dear policemen seem to think that a man who wants to buy a gun is doing nothing but planning a murder.

As you certainly will understand, we Norwegian shooters are great admirers of the freedom which the American people have around their gun business. They can walk into a shop and buy a fine gun, carry it home by daylight, and have it in their house, without any risk of having their home turned upside down by frowning policemen, and be taken away to jail for their willingness to defend their country. We Norwegians surely are asked to defend Norway when someone shows up, like in 1940, but they do not like that we teach ourselves to handle firearms. Things like this are not far from tragic comedy, but it's fact. We can hardly understand that not every American is proud of his freedom for buying and possessing guns, and we are sending you our best wishes and begging you to never give up your fight against the antigun laws.

NILS KVALE

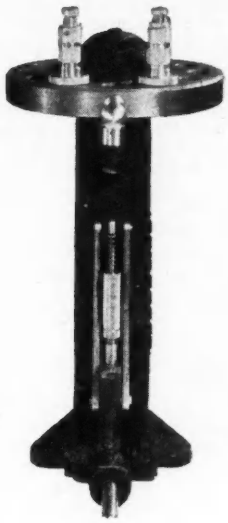
● *The NRA Board of Directors, last year, amended the Association's by-laws to provide for non-resident membership in the case of non-US citizens. Non-resident members enjoy all benefits of active membership except the privilege of purchasing from the US Ordnance Department.—Ed.*

UNIVERSAL *RELOADING TOOLS*

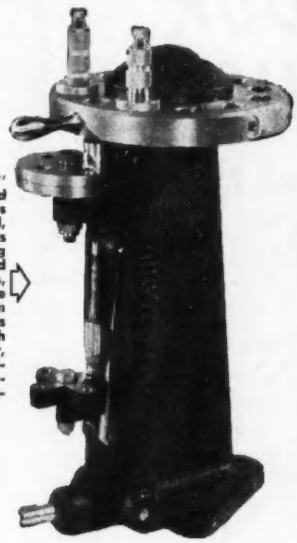


The Model "A" Universal Tool has a three position indexing turret head, holding any three dies in sequence. Complete for one caliber as shown, $47.50. Any parts of the tools to the right can be put on this model.

The Model "B" Universal Tool, same as Model "A" Tool, except that it has a twelve position indexing turret head, holding any twelve dies in sequence, complete for one caliber as shown $55.00.



This Model "B" Tool with added features, same as Model "B" Tool, except that it has rotating indexing shell holders and primer rod turrets, complete for one caliber as shown $68.50. Many tools can be added, such as: bullet puller, semi-automatic primer feed, and powder measure adaptor dies.



See our ad next month on the latest Hollywood Reloading Tools

DISCOUNTS TO DEALERS

In Canada, order through
WESTERN SCOPE SERVICE
P.O. Box 220, Calgary, Alberta

HOLLYWOOD GUN SHOP

6032 HOLLYWOOD BLVD., HOLLYWOOD 28, CALIFORNIA

BISHOP STOCKS

JOHN H. BISHOP

TWENTY YEARS of untiring effort has developed the BISHOP line of rifle stocks to what it is today.

TWENTY YEARS of experience in the machining, drying, and manufacture of material for gunstocks.

TWENTY YEARS building an organization of the most skilled men in the gunstock making industry.

TWENTY YEARS of close contact with the American rifle shooter trying to build friends and good will has resulted in the BISHOP stock being the most popular today.

REINHART FAJEN

BISHOP *Semi-finished* STOCKS

Superior Grade:

(white inserts optional)

Sporter	$ 8.95
Target	11.50
Mannlicher	11.50

Leader Grade:

Sporter	5.00
Target	8.50
Mannlicher	8.50

Stocks for left handed shooters obtainable in sporter type only

BISHOP *Finished* STOCKS

Standard Grade:

Standard grade, hand rubbed, oil finish, beautifully checkered, Monte Carlo and cheek piece.

Price postpaid $32.50

DeLuxe grades obtainable at higher prices.

Custom fitting at no extra charge.

Write for free catalog—Catalog No. 1 covers semi-finished stocks—Catalog No. 2 covers finished stocks.

E. C. BISHOP and SON, Inc. . . . WARSAW, MISSOURI

YOUR CHOICE of .22 Cal. AUTOMATICS

15-shot. Tubular feed.

"Mossberg's Pride"

A de luxe automatic at a down-to-earth price.

Model #151M

$30.90

$31.70 west of Rockies

Scope shown on each rifle is Mossberg 4-power Model 4M4. Mount slides into dovetail grooves in rifle's receiver. Only $9.35

NEW!

Carbine style, 7-shot clip type with HINGED FORE-END

A wonderful little rifle for hunting and plinking.

37" long. Weight only 5 lbs.

Model #152

$26.95

$27.80 west of Rockies

Fore-end forms handy 5" grip

SEE THEM AT YOUR DEALER'S

FREE...

Mossberg's complete catalog. Send for it today.

No sales at factory

O. F. Mossberg & SONS, Inc.

92508 ST. JOHN ST., NEW HAVEN 5, CONN.

Incidentally . . .

One of the continuing gripes brought up by some NRA members . . . especially club members and tournament sponsors . . . is that the shooting sport does not get the press 'publicity' it deserves. Typical is a letter from an irate member in Pennsylvania who complains that "shooters in this area get less newspaper publicity than a 12-year-old sandlot team." He was explaining why he failed to renew his membership.

Others will write to NRA Public Relations folks and bitterly chastise a local writer or editor for ignoring shooting in favor of the so-called "major" sports, or for "butchering a story so badly that no one can get any sense out of it."

It is easy to be sympathetic, but plain fact is that in most cases it is a local problem—not a national one. The NRA can give advice . . . and will . . . but in general, newspapers rightfully resent direct interference by a national organization on a strictly local matter.

* * *

Despite what some shooters think, there is no dearth of newspaper space given over to our sport on a national basis . . . that is, through contacts and releases issuing from national headquarters. During 1948, for example, NRA received from its clipping services 7,903 newspaper clippings which totalled 42,828 inches of newspaper space. The actual figure must be at least twice that high, inasmuch as even the best clipping services return only a percentage of the mentions appearing in U.S. papers. Even that 42,828 figure represents a whacking $129,000 investment if it were purchased at the lowest advertising rates.

Radio is the same story. PR files show NRA-inspired air time in 1948 totalling more than 4,500 station minutes . . . which would have cost something like $112,500.

Add more than twenty-five national magazines, including most of the big ones, which used shooting stories during the year . . . at a total page value which no one can estimate accurately.

That may be peanuts compared with the space given to big-league baseball and big-time football, tennis, racing and golf. But remember, all that stems from the national headquarters only . . . of a sport not distinguished for spectator appeal or mutuel machines.

Locally, where the biggest job can be done, the picture is not as good as that. A few clubs are doing all right, are on friendly terms with their editors, and don't expect miracles. Others aren't doing anything and expect the newspapers to 'discover' them. Some seem to be going out of their way to aggravate the situation.

Take the case of a midwestern club officer who doubles as the club's publicity man. He complained recently to the NRA that the sports editor of the only local newspaper took a personal dislike to him and told him flatly that news of shooting activities would get a minimum of space. What to do? Complain to the managing editor or the publisher? Perhaps as a last resort, but first why not hand over the job of publicity officer to another club member who might hit it off better with the sports editor. After all, the principal purpose of public relations is to create a *favorable* sentiment toward the sport . . . not to alienate.

On a recent visit with the sports editor of one of the nation's largest metropolitan dailies, NRA's public relations people were told that he would never print another line of local shooting news. Reason: Too many local shooters call in to complain about the way the story is printed . . . that it doesn't present a true picture of what happened. Can we blame the sports editor? After all, when compared with other sports our competitive game is relatively new and it is complicated. Wouldn't it be more reasonable to simplify our own reports to conform more with what the newspapermen and public can understand?

* * *

It all adds up to the fact that good press relations are essential to good public relations, and that if we want publicity we must make concessions for it . . . in this case by acknowledging the newspaperman's problem and doing something about it.

—R.J.S.

COVER

Taking the spotlight with this month's cover is a fashion note for the fair sex. The attractive suede-trimmed shooting jacket was designed by the NRA's Lois Agee, and is here modeled by its designer. First shown at the National Rifle Association's convention in Washington last year, the coat was created with eye appeal in view as well as practicality. Not commercially available at present, it is hoped that a manufacturer can be interested in placing the NRA-designed jacket on the market. The photo was taken by Rifleman staff photographer Dick Reish with an Automatic Rolleiflex and Ansco color film. Exposure was f6.3 at 1/50 second with two silvered reflectors.

PUBLISHED MONTHLY BY THE NATIONAL RIFLE ASSOCIATION, 1600 RHODE ISLAND AVENUE, WASHINGTON 6, D. C. DOMESTIC RATES (NORTH, SOUTH, AND CENTRAL AMERICA) $4.00 A YEAR, $7.00 FOR TWO YEARS, $10.00 FOR THREE YEARS; ELSEWHERE ADD $.60 PER YEAR FOR FOREIGN POSTAGE. ENTERED AS SECOND-CLASS MATTER, APRIL 1, 1908, AT THE POST OFFICE AT WASHINGTON, D. C., UNDER ACT OF MARCH 3, 1879.

COPYRIGHT, 1949, NATIONAL RIFLE ASSOCIATION OF AMERICA. ALL RIGHTS RESERVED.

FOR CHANGE OF ADDRESS, GIVE BOTH NEW AND OLD ADDRESS AS THE LATTER APPEARS ON ADDRESS LABEL.

The AMERICAN RIFLEMAN

Official Journal of the National Rifle Association of America

1600 RHODE ISLAND AVENUE, N.W., WASHINGTON 6, D. C.

VOLUME 97 NUMBER 8

AUGUST 1949

As Ye Sow 12
AN EDITORIAL

Double-Gun Mechanisms 13
BY COL. E. H. HARRISON

Walnut and Silver 17
BY G. E. DAMON

Perforating an Enfield 21
BY L. E. CAPEK

Tater Cellar's Junior Coach 22
BY ALLYN H. TEDMON

The Bullet's Flight, Part II 25
BY PEYTON AUTRY

Tough Critters 28
BY ELMER KEITH

This Stuff, Gunpowder, Part I 32
BY JULIAN S. HATCHER

Combustible Cartridges 35
BY BEN F. HARDAWAY

So You Want to Go Light! 37
BY BUD JACKSON

Loads for the 8 mm. 40

International and National Matches 43

Rifle Shooting in Denmark 45
BY PHILIP B. SHARPE

Harper's Ferry 1819 46
BY C. MEADE PATTERSON

Home-Made Can Thrower 50
BY FRED M. SEGUIN

Old Coach 51

☆ ☆ ☆

C. B. LISTER, *Editor*

JOHN SCOFIELD, *Managing Editor*

JULIAN S. HATCHER, *Technical Editor*

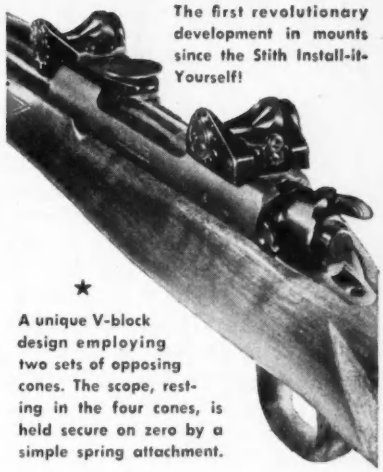
J. A. HARPER, *Associate Editor* R. J. STANN, *Associate Editor*

L. Q. BRADLEY, *Circulation* F. A. MOULTON, *Advertising*

P. B. CARDINAL, *News* R. L. REISH, *Photography*

PRAISED BY LEADING GUN EXPERTS

The STITH MASTER MOUNT

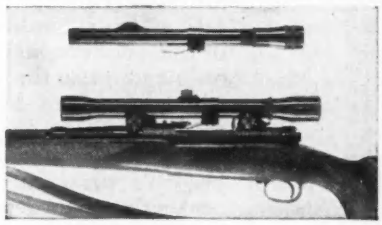


The first revolutionary development in mounts since the Stith Install-it-Yourself!

★

A unique V-block design employing two sets of opposing cones. The scope, resting in the four cones, is held secure on zero by a simple spring attachment.

Now in less than ten seconds, you can switch your favorite scope from one rifle to another... or change scopes on the same rifle! This is made possible with the Stith Master Mount. Different scopes may be quickly interchanged. No spare parts or tools necessary. Just switch and shoot.



WHAT IT WILL DO:

Different scopes with ¾", ⅞" and 1" tubes may be used with quick interchangeability; no re-zeroing necessary.... Quick changing of scopes may be done with one hand. No spare parts or tools required.... Second set of bases on another rifle permits use of same scope on both, maintaining zero.... Opposing cones in front and rear bases give elevation and windage adjustments.... Built-in pop-up peep sight is instantly available when scope is removed. Adjustable for windage and elevation.

MASTER MOUNT $20 •

Extra Bases $15 • Extra Bands $5 •

See the Master Mount at your dealer's now or write direct for details.

STITH CATALOG
Now Available

Showing our complete line. (Please send 10c in coin to cover handling and postage.)

DEPARTMENT 38

STITH MOUNTS
500 TRANSIT TOWER
SAN ANTONIO 5, TEXAS

AS YE SOW . . .

On May ninth, in New York City's crowded garment section, an organizer for the International Ladies' Garment Workers' Union was fatally stabbed in broad daylight. Many people saw the murder, but the police had great difficulty solving the crime.

On Wednesday, June twenty-second, ten New York City detectives were commended at the City Hall by Mayor O'Dwyer for their work which resulted in the indictment of two men as the murderers. New York District Attorney Frank S. Hogan spoke at the ceremony and pointed a moral. As quoted in the New York Sun, he "roundly criticized 'otherwise decent citizens who refused to cooperate with the law enforcement agencies. These people believe that law enforcement belongs to the Police Department,' Hogan said. 'That is not true. It is the duty of every citizen.' "

New York's District Attorney stated a fact. But, like too many of the present generation of law enforcement officials, he aimed his criticism at the wrong target—at decent citizens. The moral he drew needs to be learned by the district attorneys, the police and the City Fathers in New York and in many other American cities.

Who has tried the hardest to make decent citizens "believe that enforcement belongs to the police"? Not the educators, businessmen, or citizens' associations. Who then? The district attorneys, the police departments have alone preached that pernicious doctrine of supine citizenship for the past twenty years! And, leading the propaganda campaign by word and deed have been the law enforcements officers of the great cty of New York.

It was the New York City Board of Estimates which last year raised the price of a pistol permit application from $1.50 to $10.00 and an application for renewal to $5.00, with the proviso that the police keep the money if the application was refused. It was Mayor O'Dwyer who signed that ordinance over the protest of many "decent citizens". It has been the police who have turned down thousands of applications for new permits with a lecture to the applicant on the theme "You don't need a gun. The police will protect you". It is possible that some of the ten detectives commended in Mr. Hogan's presence on June twenty-second have knocked on the doors of decent citizens to demand that their guns be handed over to the police because an application for renewal of license has been refused, and have said, "You don't need a gun. It's up to the police to handle the crooks in this town."

No doubt Mr. Hogan was unaware of the fact that only a few months before he made his speech a courageous chauffeur, living in the home of his employers, was jailed and fined for using a revolver in that home to stop an attempted burglary and an assault on the wife of his employer—an incident many times repeated in the case of decent citizens in the domain presided over by the Mayor, District Attorney and police of New York City.

In the face of the facts spread through the columns of the New York press and resentfully nourished in the memories and files of New York's decent citizens there is a clear record of who is to blame for the condition that so greatly, and rightfully, concerns New York's District Attorney. "These people believe that law enforcement belongs to the police" because the *police* have insisted that this is as it should be.

Mr. Hogan's speech on the duties of citizens certainly pointed a moral. It was that if policemen want the active cooperation of decent citizens, policemen must cooperate with decent citizens, instead of jailing them when they round up criminals. If policemen want citizens to believe it is their duty to help enforce the laws, policemen must stop depriving citizens of the means of protection and they must stop the old familiar chant "stop trying to protect yourself. The police will take care of the crooks in this town."

As ye sow, so shall ye reap!

C. B. Lister

DOUBLE-GUN MECHANISMS

By Colonel E. H. Harrison

The basic difference between your double gun and one of 150 years ago is in the firing lock and breech mechanism

THE DOUBLE-BARRELED gun assumed its present general form about a hundred and fifty years ago in the classic pieces made by the celebrated Joseph Manton and other London gunmakers. In exterior form, caliber, weight, balance, stocking, and manner of use, the double gun of today does not differ essentially from the London gun of that time. No other firearm has shown such stability of form.

There has been, however, a long evolution of firing locks and breechloading mechanisms leading up to those of today. The owner of a double gun, whatever its age or country of origin, can find in it the impress of many slow advances worked out first by individual makers and then adopted by all of them. Even now this is so: from Vienna to New England all double guns are basically alike.

The breechloading double rests on a single fundamental device, the hinged action. Like almost all fundamental inventions in arms, it originated in Europe. While the hinged action had been used sporadically in German breechloaders for two hundred years, it was systematized by C. Lefaucheux, a Paris gunmaker, about 1836. He was the man whose name has become attached to the pinfire cartridge.

The Lefaucheux gun was simplicity itself. Figure 1 shows the earliest Lefaucheux type of bolting. The bolt which fastens the gun closed is nothing but a turnbutton engaging a lump on the bottom of the barrels near the breech, forming the so-called 'double grip'. The bolt is turned for release by swinging to the right an under-lever which lies beneath the fore-end. The cocks, or hammers as they are now called, were arranged to strike downward rather than froward, since the pins from the cartridges projected straight up.

Fig. 1: The earliest and simplest type of double-gun bolting mechanism, a turnbutton which made engagement with a ridge beneath the breech end of the barrels, was standardized by C. Lefaucheux, a Parisian gunmaker

It will be noticed that the barrels are hinged to the front end of the action body, and they are bolted down to that portion of the body lying beneath the barrels, which is called the bar. The earlier guns of Lefaucheux type gave trouble by a stretching and bending of the bar, permitting the barrels to droop. When this was corrected by strengthening the bar, the breechloader was considered acceptable, and by 1855 it was in wide use in England and Europe.

The pinfire cartridges, while looking very dangerous nowadays, were not considered so at that time and were even carried loose in the pocket. But in 1861 the first center-fire double gun was put on the market by a London maker named Daw. Some practical men objected to center-fire ammunition because it required that the gun be complicated by an extractor, while the pinfire gun had no such frill and the gunner pulled out the empties by the pins! But these stalwarts were soon overruled, and the pinfire passed out of use except on the French countryside where it can be seen to this day.

When the hinged action and center-fire ammunition became commonplace, the double gun entered a long period of improvement and refinement. The 1860's saw many famous names—Purdey, Rigby, Greener, etc.—already long in existence. Prompted by social conditions of the time, these and other makers continually strove to make the mechanical parts of the gun equal in elegance and refinement to the gun itself. Efforts were centered on both lock* and bolting arrangement.

While the primitive bolt of Figure 1 continued in use for a long time, it was not completely satisfactory and a variety of others were invented. By far the most important was the Purdey double under-bolt. Shown in Figure 2, it is a flat piece lying within the bar and engaging large notches in two tandem lumps beneath the barrels. The appearance of these notches is so familiar that they are not illustrated in detail. Hardly an English or European gun can be found without this bolt; on the other hand, not a single American gun uses it, though some do use a single under-bolt.

The double under-bolt made possible for the first time a characteristic feature of the modern double gun—the snap action, which bolts itself automatically when the barrels are closed. Here automatic bolting is accomplished simply by a

* The word *lock* was appropriated long ago for the firing mechanism; hence the piece that fastens the gun closed was given another name, *bolt*. The odd fact is that the lock and the bolt actually affect each other, and neither alone can be understood fully.

spring pushing the under-bolt forward into the notches as soon as the notches come down into line.

Several means were devised to draw the under-bolt to the rear for disengagement. Popular for a long time was the under-lever, fitting below the trigger guard and dropping down in the same way as the lever of a Farquharson action. It was arranged to start the bolt rearward by a prying action, and the mechanical advantage made it especially suitable to very heavy guns and rifles in which the weight of the barrels and the forces of discharge tend to stick a tightly fitted under-bolt. Sometimes the external part of the lever was bent to the right and upward, resulting in the side-lever action. Representative of this action is the double-barreled pistol illustrated in Figure 3.

The familiar top-lever action was first brought out by Westley Richards. It was accepted at once and is now universal, though side-lever and under-lever guns continued to be made in small numbers until recently.

The first hammerless gun lock was put on the market by Daw in 1862, after he had prepared the way with his center-fire doubles of the preceding year. In Daw's gun, cocking was done by the first movement of the under-lever. Several others made guns on the same system, but the hammerless gun did not become popular until Needham in 1871 arranged the cocking apparatus to be operated by opening the barrels, the weight and leverage of the barrels making the operation very easy. A final improvement was made by Anson and Deeley, who in 1875 introduced the construction of cams in the rear face of the fore-end to operate the cocking levers.

When the outside hammers were eliminated and the inside tumblers made to serve as hammers, the locks remained mounted on side-plates. There are two types of sidelocks, called back-action and bar-action depending on whether the mainspring lies to the rear or forward in the bar. These two types are shown schematically in Figures 4 and 5, in which the sears and other parts are omitted for clearness.

A striking modification was the so-called boxlock, invented in 1876 by Anson and Deeley. In this type the hammers are

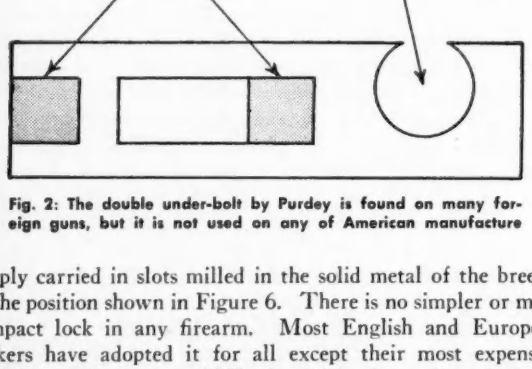


Fig. 2: The double under-bolt by Purdey is found on many foreign guns, but it is not used on any of American manufacture

simply carried in slots milled in the solid metal of the breech, in the position shown in Figure 6. There is no simpler or more compact lock in any firearm. Most English and European makers have adopted it for all except their most expensive models, and Greener and Westley Richards use it exclusively. Every American double, with the single exception of the L. C. Smith, is made on some variation of the boxlock.

The forces in a gun during firing act to separate the barrels and breech, and also to rotate the barrels about the hinge. An under-bolt does not fasten the barrels to the breech, but only secures them to the bar. Therefore the tightness of an under-bolted gun depends entirely on the strength of the bar.

Note that with the back-action hammerless lock in Figure 4 the bar must be hollowed out enough to take the cocking

Fig. 3: The side-lever action is a variation of the under-lever developed by bending the under-lever to the right and upward to lie along stock

levers as well as the under-bolt. With the bar-action lock, the bar must contain those parts and the mainsprings also, as can be seen in Figure 5. Despite this, the bar action is much the more usual and the back action is found only in some double rifles in which maximum strength is desired. The Anson and Deeley boxlock action (Figure 6) requires that the bar contain not only the same parts as the bar-action sidelock but the toes of the hammers as well. The boxlock bar therefore is the weakest of the three.

The above considerations caused several makers to extend to the rear the top rib lying between the barrels, bolting the extension to the standing breech in various ways. The most widely adopted was W. W. Greener's invention of 1873, in which the extension is fastened by a bolt running crosswise in the breech near the top. Some English makers still use only the under-bolt on their best side-lock guns as a matter of pure pride; and with fine workmanship and better steels than formerly were used, there is little trouble from loosening. Otherwise, some top fastening is added, and boxlock guns almost never are built without it.

The last really important addition to the double gun was the ejector, a mechanism which strikes the stem of the extractor a sharp blow when the gun is opened, throwing the fired case out smartly. The first successful ejector was brought out in 1874 by Needham. It very ingeniously made use of the regular mainspring of the lock to give the necessary blow to the extractor. For some time all ejectors were made on that plan. Eventually, however, the ejector was given by Deeley the form of a miniature pair of gunlocks installed in the fore-end iron, their hammers striking the extractors to give ejecting action. The ejectors are cocked and tripped by the forward ends of the regular cocking levers, and so do not function when the gun is opened unless the barrel on that side has been fired. Figure 7 shows one type of fore-end ejector.

While ejectors still are found in only the higher grades of English and European guns, in the United States ejectors are standard nowadays for all guns except the most inexpensive. A simple spring ejector is used even in the cheapest single-barrel arms, though it is non-selective and throws out the cartridge whether fired or not.

The history of the now-common single trigger is much the same. It gained much wider popularity in America than in England, and in fact is now standard equipment on such doubles as the Winchester. Even very inexpensive American guns offer the single trigger, though in such cases it reverts to the original non-selective form which always fires the barrels in the same order without choice. Until recently almost all single triggers were subject to the disconcerting possibility of 'doubling', or firing both barrels at once. It would not be of any real use to describe the construction of various single triggers here because they definitely should not be worked on by the owner. I have been told that doubling in a magnum 10-gauge shakes the shooter up so that he does not hit very often for the rest of the day. On the other hand, some European makers will on order supply wild-fowling guns with sear arrangements by which both barrels can be fired together at will. Tastes differ!

If it seems that all the fundamental developments in double guns are of foreign (mostly English) origin, the only answer is that it is simply a fact. However, American developments of mechanisms of foreign origin are noteworthy.

An essential of the American gun is that it is designed not only for mechanical excellence but also for ease in manufacture. That is most admirable, for it results in the buyer receiving the best possible gun for a moderate or small price. Hence in what follows we shall pay due attention to the low-priced gun. In doing so, however, we may as well kick over a few superstitions in passing.

We are all accustomed to thinking of European manufacture as quite unstandardized, with guns made so individually that they are entirely unalike; and of American manufacture as the realm of opportunity for individual enterprise, yet producing guns so standardized that they are all alike. Actual facts are quite the opposite. With only a few exceptions, European doubles are so standardized in pattern that some large makers can and do supply one-design forgings for each part of the gun for the multitude of individual makers to buy, finish, and make into complete weapons bearing their own names. In contrast, the entire manufacture of American doubles is in the hands of only four or five large companies, but the different makes and models vary greatly in design.

American breechloading double guns began to appear in the 1870's. Balanced like crowbars and with stocks reminiscent of the Kentucky rifle, they could not displace the English guns that dominated the market. Shooters who could afford fine imported guns bought them and were well satisfied. Those who had to choose the cheaper imported article were far from satisfied, for there were no guns both cheap and good. In the next decade, however, the American gun began to improve, and eventually assumed domination of the market by virtue of unprecedented strength and durability combined with low or moderate price.

The one really distinctive American invention in double guns is the rotary top bolt. It was the conception of Henry Baker, the outstanding American designer in this field. Figure 8 shows a gun built with the rotary top bolt. Notice the large top extension and the absence of any under-bolt. The rotary bolt is a cylinder lying lengthwise in the top of the action body. Its front end is cut to form a hook, thickening at its base in both planes. This hook engages the rectangular hole in the top extension. The bolt is rotated about its long axis by movement of the top lever against a spring, which forces the bolt in the direction to engage the hook. As the gun wears, the hook enters the extension more deeply, automatically taking up all shake.

The rotary top bolt is the most rational of all the types of double gun fastenings, in my opinion. The standing breech and the bar of a gun form two sides of a triangle. When the barrels are bolted to the bar only, the third side of the triangle is left unfastened, and the assembly is rigid only because of the brute strength of the action. Bolting the barrels to the top of the breech completes the triangle, forming an inherently rigid figure which utilizes the metal of the action most efficiently. Top bolts had been originated by Greener and Westley Richards long ago, and the latter used it alone, without any under-bolt. These fastenings were not selfadjusting.

The rotary bolt was adopted first in the L. C. Smith gun,

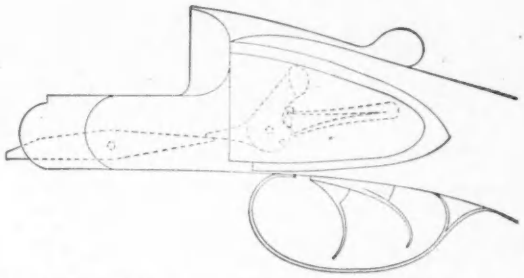


Fig. 4: Schematic drawing of back-action lock shows that it must be hollowed out at the rear to make room for the mainspring

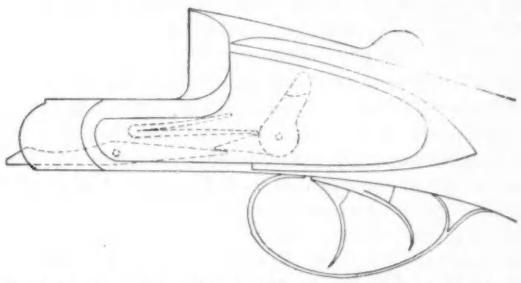


Fig. 5 The bar-action sidelock differs from the back-action lock only in having the mainspring located forward of the stock

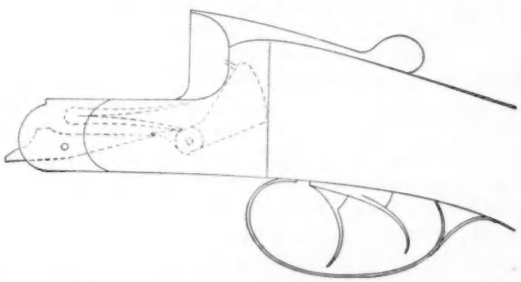


Fig. 6: The boxlock action is the simplest, most compact gunlock, containing hammers as well as cocking levers and mainspring

and usually is known by that name instead of by the inventor's. The Fox has used it almost as long. More lately it was adopted by Ithaca. In all these makes it has given nothing but complete satisfaction.

A fourth name among the best American guns is Parker. It makes use of a single under-bolt plus a top extension of simple 'dolls-head' form which drops into a mortise in the breech when the gun is closed. This is intended to resist any tendency of the breech to be pushed away from the standing breech by the powder pressure, but its effectiveness may have been overrated. It is important, however, to note that the single under-bolt of the Parker lies almost entirely back in the

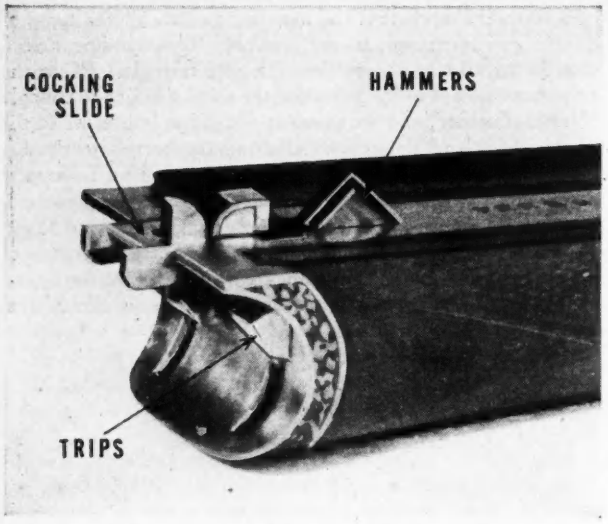


Fig. 7: Ejector hammers in fore-end are tripped by cocking levers. After firing, the hammers give ejecting action by striking the extractors

action body, and hence does not weaken the bar to the same extent as the double under-bolt of most English and European guns. In recent years the engaging surface of the Parker under-bolt has been provided with a hardened pallet which can be replaced with a thicker one in case the bolt wears.

With the successful performance of the rotary bolt so well known, it was a surprise when in 1925 the Winchester Model 21 was brought out with the older single under-bolt. The notch has a slight taper, so that the engagement can be tightened by allowing the bolt to advance a little farther. To prevent the bolt bouncing out on firing, the slope is made less than the friction angle, producing what machinists call a sticking taper. This in turn makes necessary a stop to regulate the depth of engagement. In the bottom of the notch there is a flat-headed screw which is turned in or out to stop the bolt at the required point.

The Model 21 also introduced into this country the use in double guns of high-strength alloy steels, heat-treated before finish machining but not case-hardened. These materials, plus relatively modern design, give the gun a measure of strength and endurance never attained before.

These quality guns and the inexpensive makes both illustrate the important principle of designing for minimum number of bearing surfaces. Many fine English guns are so designed that several large bearing areas must fit simultaneously. The successful inexpensive gun has few critical bearings, and the remaining interior surfaces do not have to fit anything. It must be admitted that a look inside the actions of low-priced guns, and also some not so low-priced, results in rather a shock. Modern milling practice can be made to produce better surfaces than what is seen in these guns with only one cut.

Most of our inexpensive makes are bolted as indicated in Figure 9. The bolt is formed on the forward end of the top lever and turns into a notch in the top extension—a combination of the Purdey and Westley Richards systems. It does very well.

All American low-priced single-barrel guns use a bolting system (Figure 10) which in many ways is the most interesting of any. The bolt is pivoted at its upper end, and the lower end is made to swing into a V-notch in the under lug. This notch is cut on an arc slightly eccentric with that described by the lower end of the bolt, so that the latter wedges the barrel down. It is a true cam-lock, both simple and effective. Adjustment can be done by straightening the bend in the link, which will advance the bolt into deeper engagement with the notch.

There are so many details in which these guns vary that it is not worthwhile to try to list them. Significant, however, is the return to pioneer English design in the use of simple cocking rods which act by a straight push, requiring only a drilled hole to accommodate them, or in the use of cocking hooks acting direct from the barrel lumps. More American is the quite general replacement of V-springs with helical springs. Mainsprings sometimes are installed behind the hammers, thus in effect returning to the back-action lock and avoiding weakening of the bar to provide spring space.

In considering the maintenance of double guns, remember that the barrels should close against the vertical standing breech, not against the bar. This is necessary in order to hold the barrels stiffly against their tendency to be thrown sideward by the offset firing reaction, since the barrels of a side-by-side double are offset from the (*Continued on page* 20)

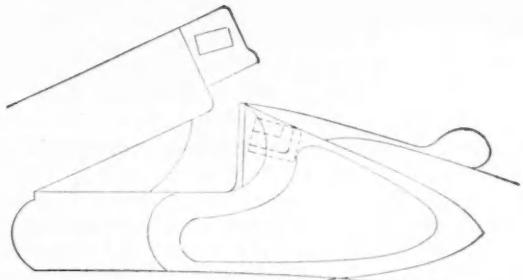


Fig. 8: The one distinctive American invention in double guns, rotary top bolting, is the product of designer Henry Baker

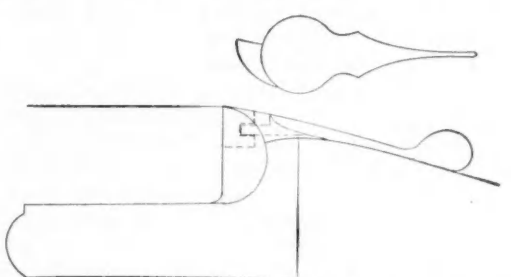
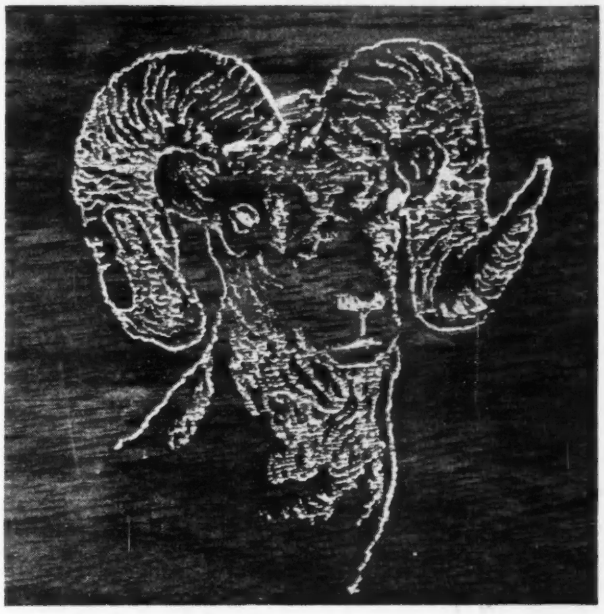


Fig. 9: Inexpensive guns are usually bolted by turning the forward end of the top lever into top extension on the barrels

Fig. 10: All American low-priced single-barrel guns use a camlock bolting in which the lever swings into a notch in the under lug

Walnut *and* SILVER

Take a leaf from your dentist's book and try silver inlays as a final touch for that dream rifle



by EDWARD DAMON

WALNUT AND SILVER. A Navaho sheepherder with belt and bracelets. An old and loved saddle with brightly polished silver mountings. The well-rubbed stock of a favorite weapon, inlaid with a running deer or elk, representing the owner's dreams—in gleaming silver.

Such ornamentation is easily within reach of the gun owner who possesses or who can borrow a few commonly owned workshop tools. The expense is small, and the possibilities for adding beauty in intricate detail to one's favorite weapon is unlimited. With a little practice you can reproduce any design you wish. The feathers on a duck, the whiskers on a mountain lion—these are as easily inlaid as the basic outline of the object itself.

You should have a sturdy bench, and some provision must be made to keep the wood being inlaid from slipping as you work. A cloth pad, a pair of leather vise jaws placed under the work, a long bag partly full of sand, or even a folded piece of heavy cloth will do the job. If you have a checkering cradle, try it; you need only a firm support for the stock itself. The cradle will also allow you to approach the job from different angles, which is always an advantage in using hand tools. If the wood article you are working on is very small, you will need some space on which to rest an arm and hand. Lighting should be arranged to avoid shadows as much as possible.

What do I need to work with? The stock or other wood you wish to decorate should be as smooth as you can make it. If your stock is lacquered or varnished, the job of inlaying is made easier, and you have also an excellent alibi for refinishing the entire stock. An unfinished stock should be sanded and lightly oiled to keep dirt from soiling the wood. The silver you will use fills minute cracks in the wood as well as the pattern you cut and a good job will be completed more easily if the wood is at least filled.

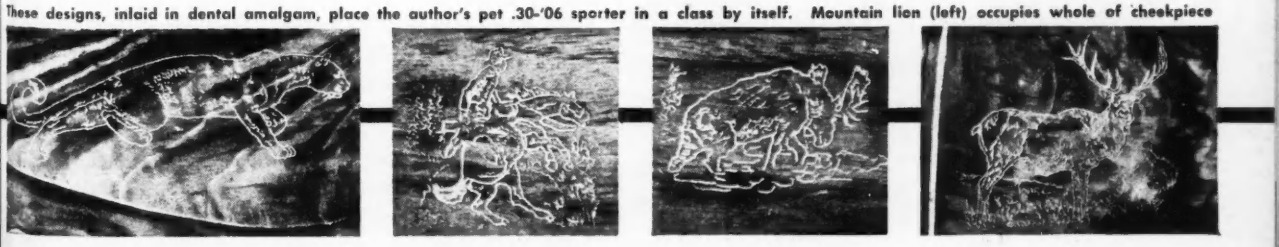
The **design** you choose may be your own or it may be something you have clipped and saved from a magazine or an advertising folder. Whatever you use, be sure that you begin with a pattern that can be placed flat on the wood you are going to inlay. A pattern is needed, even for such a familiar design as your signature. Magazines and some calendars provide illustrations which are not only executed by good artists, but which are unusually suitable for the particular requirements of inlaying with silver.

The pattern used should not be shaded too heavily. The mountain sheep head used for the demonstration inlay is taken from page 14 of the October, 1948 RIFLEMAN, and is excellent for this purpose.

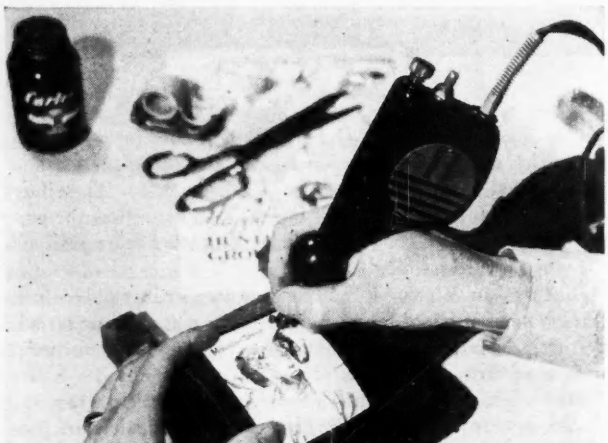
It is possible to reproduce some photographs in silver, but the printing paper must be thinner than the single-weight commonly used. It is possible, but not easy, to thin photographic paper by splitting or peeling and cutting when wet.

The **tools** you need are quite commonly found in home workshops. A **Vibro-Tool** will be used the most. It is best for all work which requires fine outlines; eyes, claws and feathers for example, and it requires less work with hand tools to finish the

These designs, inlaid in dental amalgam, place the author's pet .30-'06 sporter in a class by itself. Mountain lion (left) occupies whole of cheekpiece



1 As first step, the selected pattern is applied to gunstock with rubber cement. To minimize slipping, the edges are secured with Scotch tape



2 Vibro-Tool is then used to cut pattern into wood of stock. Work slowly, and be sure that lines are cut at least 1/16 inch into the wood

3 After pattern has been removed, lines should be 'spiked' so that silver amalgam cannot fall out. Three or four holes to inch are enough

This is all of the equipment needed to produce a silver-inlaid rifle stock. Numbered photos show each step in transferring illustration to wood

job. The needles which come with this tool are excellent for inlay work. It will pay to thin one or two of these down halfway to the tip, for very fine work.

A high-speed **hand grinder** is often used to produce thicker borders and outlines. Although this tool is not used on the design cut in this article, it is handy for solid letters, smooth outlines of birds for which no feather detail is desired, and for curved borders. If you experiment with this type of grinder, purchase very small ball cutters with diameters which produce the width of line you wish. By cutting slowly and evenly, you can undercut your design in one operation by having the center of the ball slightly below the surface of the work. The principle is identical to that affecting the cutting of a tooth cavity preparatory to filling it with silver amalgam—the same material you are going to use. You can cut straight borders with a hand grinder, but you should use a guide which is not only clamped solidly, but is raised slightly to prevent the burr from cutting the guide.

Straight borders can be made with a **hacksaw.** Use one or more blades according to the width desired. Use new blades and, before cutting, run an oilstone along the flat sides of the blade until you are sure that no teeth are set wider than the rest. This prevents tearing the edges of the border, producing an irregular edge when silver is set in the cut you have made. Hacksaw cuts should be spiked to hold the silver in place.

A **spiking tool** can be made with a thin needle and almost any kind of a handle. A piece of aluminum or brass rod, drilled to take a short section of needle, is excellent, and a pin vise is even handier to use. With this tool you can make small holes at an angle in any of your work that needs to be locked into the wood. When the silver is forced into the design you have cut these holes will fill with silver providing spikes which are a part of the work and which will hold it firmly in the wood.

A **ball-peen hammer** is a necessity. The face should be only slightly crowned and highly polished. If the crown is too deep, the heavy pressure you are going to use will depress the edges of your inlay and distort the outlines you have cut so carefully. The peen end is going to be used as a handle when you apply pressure to the rapidly setting silver amalgam.

Silver amalgam is the material used to produce the inlay itself. Properly applied, it holds its polish as well as sheet or wire silver, and it is also guaranteed to work into and fill every break in the wood that you have either created or forgotten to mask off. Your dentist is an excellent source for your original supply of silver. He can mix it for you or show you how to do it yourself. Instructions for mixing are given in Step 4. If you are to do much inlay work, get the address of a dental sup-

ply house and order your own materials, including a small mixing bowl or mortar.

Rubber cement is needed to help hold the paper pattern in place and **masking** or **cellulose tape** will help to hold large patterns in position as well as mask off parts of the wood that the silver amalgam should not reach. Fine **sandpaper,** a singlecut **file** and stock-fiinishing materials of your own choice complete the list of needed items. Now . . . how do I do it?

Step one: Select the location of your inlay on the stock. Coat the design you have chosen with rubber cement and lay it smoothly on the stock. Leave at least a half inch of paper around the design itself; more is all right. Use tape to hold down the edges if you fear the design will slip or tear before you have finished. Use tape also to mask off any parts around the pattern you wish kept perfectly free from silver.

Step two: Using a Vibro-Tool with a thin needle, begin to follow that part of the pattern which is farthest away from you. It is better to begin with some of the fine detail and work out to the border outlines; otherwise the center of your pattern may fall out before you are able to use it. It is both natural and desirable to hold the tool at a slight angle; this helps to keep the silver from coming out later, helped also by the rough wood fibers under the surface. Work slowly, trying to cut at least 1/16 of an inch deep on main lines of the pattern.

You will find your work easier if you can move the wood at different times during the cutting process. It is easier to move the cutting tool toward you; you will also find cutting with the grain easier than cutting across it.

Shading is done by allowing the tool to operate more rapidly, almost skipping across the part you wish shaded. Run across shaded portions at two angles; this will create little spikes for holding these more shallow inlay spots. The deeper you allow the needle to go, the more slowly you must work. The width of the line you make is judged by the diameter of the needle at the surface of the wood.

Step three: When all of the tracing has been completed, remove the pattern or what is left of it. Do not attempt to remove the rubber cement because it helps to keep silver from entering minute depressions found in the wood; it will rub off easily later. Take the spiking tool you have made and make short, angled holes in the main lines of your pattern. Three or four holes to the inch is usually enough. Be careful not to disturb the edges of the pattern you have already cut. These spikes are usually unnecessary in soft wood or in narrow outlines or shading areas.

Step four: By this time you should have either made arrangements with your dentist to provide the silver amalgam, plus a little advice on how to pack it firmly, or have learned to prepare it yourself. The proper proportion is approximately one part of mercury to seven parts of powder. Measuring devices of several types are available through dentists; the devices are inexpensive and some of them are practically automatic. The powder and mercury must be thoroughly blended before using. If you use a mortar and pestle similar to the one pictured, remember that the material must be gotten off the bottom—the mixing action takes place on the sides. Experience will soon tell you how much to mix at once. A rough estimate for the inlay in the pictures is enough to make a ball about the size of a small pea. It is better to have a little more than not enough.

Take a ball of amalgam about the size of a 'farmer' match head and test it by trying to force mercury out of it in the palm of one hand, using the thumb of the other. (Any mercury you can squeeze out of the amalgam should be discarded or used

4 Here is the stock with silver partly applied. In order not to injure outlines of design, silver is rubbed into the lines with ball of thumb

5 Hammer with polished end is used to rub amalgam firmly into lines. This compacts silver and smooths surface prior to final sanding and polish

6 Twenty minutes to a half hour later, the inlay can be sanded down to the surface of the wood. File can be used to trim down biggest lumps

later.) If it is 'dry' enough, start rubbing it into the pattern with your thumb. Be sure to fill completely every mark you have made in the pattern and to leave the amalgam slightly above the surface of the work itself. Roll another ball of amalgam and keep filling. Press down hard with your thumb as you go along. If you think you do not have quite enough silver, collect some of the excess along the filled lines and use it.

Step five: Take the hammer and *rub slowly,* with *heavy pressure,* every part of the inlay. This will rub off more surplus silver which you can use to bolster up the thin spots that you will invariably find. You should not take over five minutes for this job because the silver will soon begin to harden. Make sure that enough pressure is applied over the entire working surface to compact the silver and assure a smooth surface when it hardens. It sometimes helps to move the hammer along the outline, tapping it with another light hammer to insure compaction. There should be mighty little silver left on the uncut surfaces by now, and that should be so thin that it will crumble and remove easily when it hardens.

Step six: You will have to wait from twenty minutes to an hour or so before doing anything more, depending upon the proportions of the mixture you have used and the thoroughness with which you compacted it. Test it carefully by rubbing with your thumb; if it 'slides' rub the spot you tested with the hammer and wait. Then rub a piece of fine sandpaper carefully over one corner of the pattern. When the silver gets shiny from this test, wait another five minutes and take the inlay down to the surface of the wood with a sanding block. Sometimes a singlecut file is handy to trim down the high est bumps of silver. Any cutting or chiseling must be avoided you may pull part of the inlay out of the wood.

You may discover that, in spite of your care, you have omi ted filling a small part of your design. Just make a very sma ball of amalgam, apply it, and wait until it hardens.

If you are like the author you invariably make up too muc amalgam at one time. You can always throw it away, but i is better to have another cut-out design to fill. Why not cu your signature in another part of the stock, or your initials i one of your favorite pipes, with a hand grinder? Have thes patterns waiting and fill them up a little at a time if you wish

Your dentist knows many tricks of handling silver amalgam that will aid you to vary your technique and do a better job a you practice. For example, when making a wide, straight bo der around the butt of your gun, just ahead of the buttplat you will have to mix more than one batch of amalgam, sinc you cannot make enough to use before it begins to 'sugar' an harden. Go as far as you can, pack it very tightly, and the undercut the end of the silver strip at a sharp angle. When yo apply a fresh lot next to this end, you have a lock joint instea of a butt joint that tends to crumble at the point of joining

The possibilities for profit are not to be ignored. Gun lover commonly admire the intricate silver ornamentation of olde weapons, but have never felt that similar work could be ap plied to their own favorites. Silver amalgam inlays are inex pensive and their variety and application are practically un limited.

DOUBLE-GUN MECHANISMS

(Continued from Page 16)

center line of the gun. It often happens that after considerable use, there is a slight stretching or bending of the bar and hook. This moves the hinge pin a little farther from the breech, and the barrels must close farther before stopping against the vertical surface. When they do so, the slack is no longer taken out of the bolting device and it may appear that the latter has become worn. Sometimes the barrels go clear down to the bar without touching the vertical breech at all.

To test the breeching, turn the gun upside down. With the left forefinger, pull the top lever to the side in order to disengage the bolt; the weight of the barrels will still keep the gun closed. Now shake the gun from side to side. If the barrels are on the breech as they should be, the gun will feel as though it were one piece. If any shake is felt, the gun should be re-jointed. This is done by replacing the hinge pin with one of greater diameter or by increasing the diameter of the existing pin with chromium-plating. Some inexpensive guns will not meet this test even when new, and they ought to be given the same treatment except that the crosspin generally is riveted in and cannot be removed.

A double gun should not be closed as though it were a manhole cover. The barrels and the stock each comprise about half the weight of the gun. When such heavy parts are slammed violently together, excessive stresses will result. Such treatment is a great cause of looseness. Close the gun gently.

The lock work needs only a little instrument oil on the contact points of the limbs, at very long intervals. The double gun will not squirt oil in your eye if you overdose it, but the oil will drain down and eventually soften and rot the stock where it joins the action. The bolt and hinge should b lubricated with an oil of rather heavy body, as it will be kep between the working surfaces by capillary action without run ning where it is not wanted. And do not work on the selectiv single trigger yourself, or even douse it with oil.

Many users desire to let down the ejector hammers whe the gun is put away for long periods, to avoid fatiguing th ejector springs, but they are at a loss as to how to go about it The ejectors can be down only when they have just acted an the gun is still open. With the gun like this, remove the fore end, take off the barrels, and put the gun away disassembled. Before the fore-end can be put back on the assembled gun, th ejectors must be re-cocked. To do this, put the fore-end on th barrels, after having drawn the extractors back to the limit o their travel in order to permit the fore-end to go on. Then hold the barrels muzzle up and press them down on a table top, which will shove the extractors home and cock the ejectors. Then the gun can be assembled in the usual way

The stock should be kept very tight on the action—per manent looseness may result if it is allowed to work. Mos stocks still are fastened with tangs and screws. The screw behind the trigger guard is not a stock screw but only fasten the guard. The guard screw is removed, the tail of the guard pulled out of its mortise in the stock and then turned counter clockwise (looking at it from below). This will expose the actual stock screw, which then can be tightened. On some recent inexpensive models the stock is fastened with a through bolt. This is tightened with a heavy screwdriver entered in a hole exposed by removing the buttplate.

PERFORATING AN ENFIELD

By L. E. CAPEK

OFTEN IN REMODELING A 1917 Enfield, I have tried to visualize some probable use for every piece of metal that was machined away. The receiver, for example, seems to have been especially designed to provide plenty of metal for many ingenious sighting attachments. Also, the extra two inches of the long Enfield barrel seemed to have been provided for use in some manner. Since I have become increasingly interested in compensating muzzle brakes on high-powered rifles, the additional barrel length of the issue rifle provided metal which could be converted to some sort of integral muzzle brake.

In bringing my idea of a suitable muzzle brake into reality, the drawing board received much attention for two or three evenings. The shape, pressure curve and speed of the projectiles I planned to use in the Enfield were carefully computed. A reasonable design (the actual mathematics would probably bore you and besides they may be cockeyed) seemed to be one in which the bore was relieved for approximately one-half inch about one-half inch from the end of the barrel; if the relief was perforated to permit pressure escape vents equal to approximately four bore diameters, a large portion of the expanding gases would vent themselves at right angles while the projectiles passed through and partially sealed the last half inch of the barrel. This would, to my thinking, convert some of the rearward 'jet propulsion' energy to a forward thrust, resulting in a counter-recoil force. The principle involved is to seal the end of the barrel as the projectile leaves the main portion to force the gases through the escape vents.

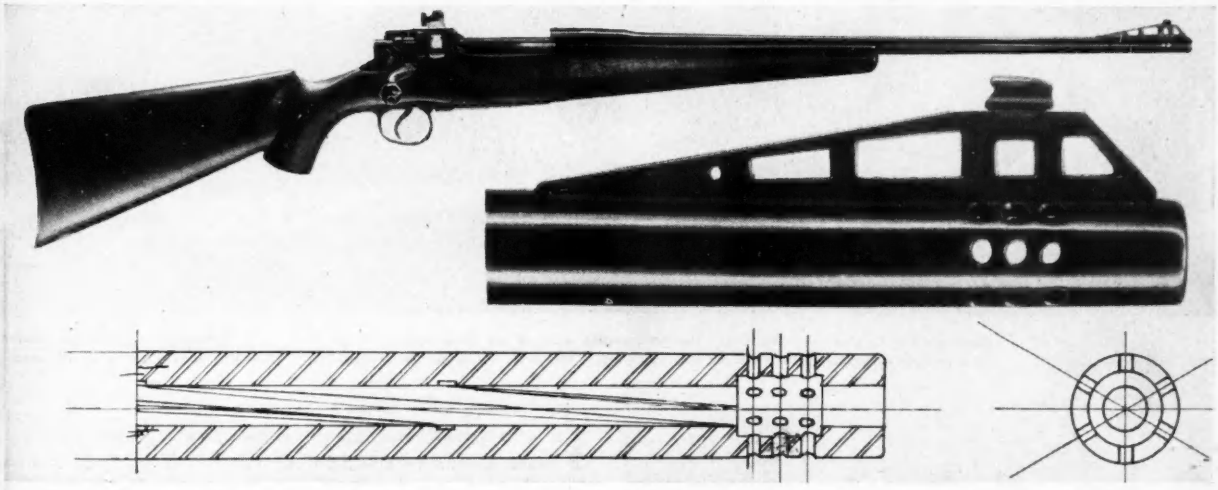
To assure non-impairment of accuracy, the rifling in the last one-half inch of the barrel, through which the projectile must pass after it goes through the vented section, was bored smooth not more than .002-inch larger than the projectile. By having the projectile fit snugly at this point, and yet not touch the smooth-bored area, more of the gases would be forced to escape through the perforations without disturbing the bullet's flight. The actual details of the design used by the writer are shown in the accompanying drawing. (Many variations of the compensator can easily be made by positioning the relief holes to aid in minimizing muzzle lift or other energies, being sure, however, the holes are so positioned that they will not be covered by the sight ramp.

When chucking the barrel (with the front sight removed) in the hollow spindle of the lathe, it is important to check absolute center from the grooves in the bore. In my setup, I was not content until the indicator revealed less than .005-inch total variation in the grooves. It seemed to me that one was not taking full advantage of the integral compensator idea if carelessness or eccentricity error was permitted. Theoretically, a serious eccentricity relationship of the smooth-bored half inch of barrel with the rifled bore would introduce a variable in the flight of the projectile. After the setup is completed, the boring bar should be used carefully to take small and slow cuts that are frequently checked. After the barrel end and relief section have been bored to satisfaction, use the lathe spindle gear dividing head to index for the drilling of the vent holes. In my case, an electric drill was mounted in the lathe tool post and the holes were spaced by the use of the compound device and the dividing gear.

There is one reconciling factor in this integral brake experiment—if a mistake is made, if it doesn't work out satisfactorily, or if you get tired of it at any time, the barrel can be cut to a very practical length and nothing will be lost.

In test firing the perforated rifle, it was found that the recoil was appreciably reduced; in fact, it made possible the constant firing of service ammunition without a heavy jacket or a shooting coat. What happened to the muzzle blast? Actually it seemed a little louder to the shooter. This is true, however, with all compensators lacking forward deflectors. Also, the normal 'crack' of the rifle sounded more like a 'crock'—in other words, a bit more hollow. To a listener approximately 100 yards away, the blast was not as loud or as sharp as a similar cartridge shot from an unperforated barrel.

With the perforations, the definite advantage of reduced recoil without the usual large 'added-on' compensator was achieved. Also, the perforated rifle retains the normal streamlined appearance of a regular arm and does not have its balance or 'feel' altered one bit. The groups made with the rifle were also interesting. While I cannot boast of one-inch groups at 100 yards, I can say that the groups were no worse than those of another similar but unventilated Enfield. ♦ ♦ ♦



Two views of the author's Enfield sporter after the 'perforating' operation. Dimensions are not shown on drawing, as these vary according to caliber

Coaching the kids at the Tater Cellar Range occupies most of my time today," says Mrs. L. C. Edwards, eight times winner of Colorado's women's smallbore championship, "besides, it's a lot more satisfying to teach kids than it is to shoot"

Tater Cellar's Junior Coach

By Allen H. Tedmon

A GOOD SHOOTER IS RARE ENOUGH BUT THIS ONE'S AN EXCELLENT COACH ALSO

IF AND WHEN YOU are in Estes Park Village, Colorado, walk around by the shooting gallery. There you will see Mrs. L. C. Edwards. You will know her by her smile. You will be impressed by her grace and energy. You will long remember the sparkle and honesty that leaps at you from her sky-blue eyes. Her given name is Ethel. She is about so tall with hair a golden-brown, and she was born in the Cherokee Nation, Indian Territory—that area we call Oklahoma today.

It's too bad you can't see Mrs. Edwards on the rifle range when the little lady is making it tough for the boys shooting the .30 caliber. How she ever stays in one piece after a day of pounding from a bucking Springfield is the unsolved mystery of the everlasting hills. Nevertheless her teeth keep working at a roll of gum and the sweet smile never fades. It is the same when shooting a .38 Officer's Model Colt or a .45 Army semiauto—the smile is always there, win, lose or draw.

Recently Bill Woolery, NRA Director from Colorado, remarked, "Ethel sure loves to shoot. I wish all shooters could get the fun out of it she does. It would make it much easier on the people running the matches."

But when Mrs. Edwards goes up on the line she isn't fooling. As she hoists that old Springfield to her dainty shoulder a steely twinkle appears in her eyes, there is a do or die set to her jaw. Then comes the wham! The recoil! When her eyes once more pick you up, regardless of the result of the shot, they are smiling and dancing.

During the war rifle and pistol shooting sort of slowed down in Colorado. Only recently has the firing line begun to look like it did in the heartless prewar days, that hotly contested period in which Ethel Edwards fought her way to the top. She got her start in the shooting gallery her husband opened when the Edwards arrived in Denver.

"I took to shooting with the police and detectives who came into our place to practice," she once told me. "And did I take a beating until I settled down to really learn how to shoot a pistol." Mrs. Edwards turned and reloaded one of the gallery rifles for a boy, then turning again to me she added "Finally, when I began to get good, they wouldn't shoot with me without a handicap."

One day in September of 1932 the sprouting pistol shooter happened to walk past the Denver National Bank. There in the window lay a show of medals advertising the State pistol match to be held on the following Sunday.

"It was a lovely silver medal to be awarded to the best woman shot", she told me. "I admired it a lot but dismissed it from my mind."

Nothing much was said about the shoot until Saturday evening when Mr. Edwards announced "We are going out to Camp George West in the morning and you are going to win that medal". She was much opposed to such a foolish idea.

"Much against my will," she told me, "we went out to the shoot. I had never fired at a 50-yard target and in fact I didn't have any idea how to sight on an outdoor target at 50 yards. We milled around through the crowd and finally I entered and paid my fee, thinking I might just as well throw my dollar into the ocean." Finally her call came and she says she felt very calm and collected as she raised her S&W target pistol and fired her first five shots. She was quite calm and collected until she overheard someone behind her say in a rasping stage whisper, "She's going to make monkeys of all of us. She has five tens!" That was it.

"Until then," she told me with a smile, "I had never known what the words buck fever meant. But woe is me, when I raised my gun for the sixth shot, I was all over the paper. I just had to shoot as my gun passed the bull. The buck bug had bitten me hard." To cut an apparent sad story short, when the scores were tabulated, to her utter amazement, she, little Ethel Edwards, was the new Colorado State champion woman pistol shot at 50-yards slow-fire. Then she began to hit her stride.

In 1937 she shot in fourth place on the Rocky Mountain Rifle Club No. 1 pistol team with a score of 279x300 and only three men shooters ahead of her. She shot in fourth place on the Denver Navy-Marine Rifle Club pistol team that won the Colorado Central Division championship in '38, her score being 278x300. The same year she shot in second place on the same team in the McNutt Elimination Match; her score was 280x300. The McNutt team was in second place with fourteen teams shooting. With a total of 116 individuals entered, the little sharpshooter landed in ninth place in the aggregate. Again in '38 she fired over the course of the Coast Guard School of Pistol Markmanship with a heavy Colt Shooting Master scoring 272x300, her slow-fire phase being 196x200. Commenting on this performance at the time, L. C. Davis of the Colt Company wrote Mrs. Edwards, "We consider this one of the finest exhibitions of shooting with a heavy revolver of this type by a lady shooter that has been our pleasure to examine in a very long time."

In the winter of 1932 the petite pistol shooter decided to take up the rifle and started shooting with the old Rocky Mountain Rifle Club. Her rifle was a match-grade Stevens tip-up, the first and only rifle of that model I have ever seen fired in the four positions. It had a Peterson barrel and was a hot little outfit, especially with Mrs. Edwards at the throttle. After a year's training, at the 1934 Colorado State match she gathered in the Colorado State Woman's rifle championship and hung that medal up alongside of her first silver pistol award. In March 1948, at Camp Carson, Colorado Springs, where the State matches were held, she walked away with her eighth State woman's championship with the small-bore rifle. What about 1949? Well, not long ago I received a letter from the little champion which said:

"In March at Camp Carson (Colorado State match) I got a trimming from a junior girl, Shirley Porter of Colorado Springs. She got 285x300 and I shot 278x300. But these juniors are our seniors of tomorrow and my hat is off to her and I do wish her success and hope she gets as much joy out of her shooting when she is my age as I do."

I could relate more evidence of the little sharpshooter's skill, especially the day at the Colorado Rifle Club when she pushed all the hot-shots back to the starting line and took first place with a neat 34 out of a possible 36 offhand at 200 yards with her Springfield. A news item at the time said that, "Mrs. Edwards shoots a Springfield like it was a twenty-two."

Winning championships and hanging up medals is all very good as far as it goes, but it is Mrs. Edwards' activities in another field that will put the name of Colorado's little champ high on the honor roll.

Several years before the war Mr. and Mrs. Edwards moved their gallery over to Grand Lake, Colorado, where

Though a match winner with a pistol before taking up .30 caliber, Mrs. Edwards "shoots the Springfield service rifle like it is a twenty-two"

Since 1932 Mrs. Edwards (holding youngster) and her husband have operated a shooting gallery. She learned to shoot in the Edwards' gallery

there was no indoor range and nothing much in the sunshine to shoot at but red-granite pebbles on the mountainside.

"I have loads of fun shooting and I love to teach children", she told me one time, "and the children seem to like me, so we get along grand."

You can easily guess why it was that early in '41 Mrs. Edwards took a Junior Instructor's examination and organized a junior rifle club at Grand Lake with sixteen charter members. The little club worked hard and fired regularly up to the outbreak of the war, then the boys went into the armed forces and their loyal coach and her "Skipper" (Mr. Edwards) moved across the range to Estes Park village.

Mrs. Edwards' reward for the job she did at Grand Lake lies in her words: "I have had many letters from boys of the group who went to war thanking me for the instruction saying how grateful they were to me."

They didn't all stop at writing letters, however. One day a tall, fine looking lieutenant of the Navy sought her out at the shooting gallery. Offhand she did not recognize the young man but as usual gave him a cheery welcome, offering him a gallery rifle. But the young officer's reply was deeply serious.

"You couldn't teach me more than you have already taught me," he said, and there was an undertone of deep feeling in his voice. "What you taught me saved my life."

In telling of the incident, she said, "I hadn't seen him since he was a little bit of a squirt, but when he said that the sparkle in his eyes woke me up and then—" she hesitated, her smile sort of faded, then she added—"and then I cried."

In 1947 Mrs. Edwards helped organize the Estes Park Senior Rifle Club with a charter membership of 80 members. As coach of the club she qualified over 60 of them. Then in April '48 she organized the Estes Park Junior Rifle Club with fifteen starting members. In the last report I had, the club counted over 51 boy and girl rifle shooters. Last winter the club had sixteen members firing in postal matches and not too long ago the club fired its first shoulder-to-shoulder match against the Fort Collins Juniors, the boys losing, the girls winning. Due mainly to the shifting population at the Park, and the difficulty in the past of keeping an indoor range, the senior club faded away. But the little coach says, "It's a lot more satisfying to teach kids anyway."

Shortly after the Estes Park Senior club died, the Longs Peak Rifle Club came to town looking for a coach. It wasn't long before they discovered they had found one. The members of that determined organization got busy and dug themselves an indoor range, walled up and roofed over with logs. They held bingo parties, turkey and merchandise shoots and the like, for both seniors and juniors, to raise the white beans of commerce to pay off the bill. They call their range the Tater Cellar Range. It's not too hot to look at maybe, but it is very comfortable and it must be the right spot. The first time the club team fired over in the Tater Cellar they jumped their ordinary score of around 1100x1400 up to 1391x1400! A month or so ago, when the range was badly burned, the young and old of the club got busy while the little sharpshooting coach was away on a visit and had it all ready for action upon her return.

There's an old saying, at least 95 percent true, that "He who can, does. He who can't, teaches." Mrs. Edwards is one of the five percent. She has proved that she can shoot and coach.

Above all things the Tater Cellar shooters are taught firearms safety, and the time certainly isn't wasted. Not long ago a man visited the Tater Cellar Range. To show off what a hunter he was, he grabbed a rifle from the rack and began aiming it with the bolt closed. An eleven-year-old rifleman, upon whom safety training had not been wasted, opened up on the visitor. "Our coach teaches us firearms safety," the boy exclaimed indignantly, "put the rifle back in the rack if you can't handle it safely!" The erring adult took the call-down in good spirit and then commended the manner in which the club is being conducted.

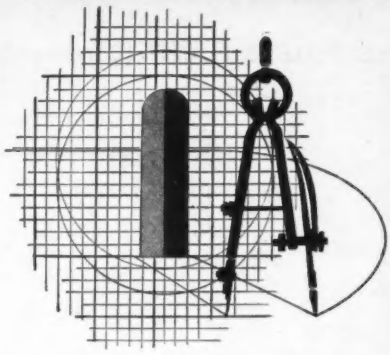
As 50 juniors is a lot of juniors, coaching help was needed and Mr. Richard St. Clair is now assisting in the job. The kids are doing all right too. In March '49, the Tater Cellar Junior Team won the non-scholastic championship at Fort Logan, near Denver. During April '49 they had five teams in training for the Junior Matches in Denver. There isn't an idle moment at the Tater Cellar Range.

One time while hanging around the gallery, I remarked to Mrs. Edwards that I was a little surprised that a hot-shot competitive shooter like her would sacrifice the time needed for practice to teach others. Her big blue eyes brightened when she looked at me and said, "I had very fine help when I was learning to shoot. My "Skipper" (Mr. Edwards), Elmer Feemster, Fred Bertram, Lloyd Markle (now Colorado State Secretary and NRA Director), and all the boys I fired with were willing to help me. Why shouldn't I want to help others?"

Colorado's dainty sharpshooter has won a place on the honor roll of the Junior rifle club instructors of the United States of America. The winning of a match or even the winning of a championship fades into a nothing when compared to what she has done. What this nation needs is more and more men and women like Colorado's Ethel Edwards, ex-State woman rifle champ, Junior coach supreme.

"Sorry! Gotta be on time for the NRA's Second Annual Convention, October 17-21" (See page 54)

the bullet's flight



DO FORMULAS FRIGHTEN YOU? IF YOU REMEMBER HIGH-SCHOOL ALGEBRA, HERE'S YOUR MEAT. THE SECOND OF THREE EASY-TO-UNDERSTAND ARTICLES ON BALLISTICS

BY PEYTON AUTRY

THE ACTUAL MANNER in which trajectory and loss of velocity for various ranges is calculated is the subject of much work and variation by shooters. They vary from simple trial and error methods to specialized mathematical methods. Ours will be trial and error to give the reader a better idea of what takes place and how to calculate it easily himself.

Table I illustrates the trial and error or 'step' method, which amounts to calculating the drop in velocity and the range covered by the bullet at various instants of elapsed time from the muzzle. The bullet in Table I has an ogival radius of six calibers, muzzle velocity of 3000 f.p.s. and a sectional density $\frac{w}{A}$ of 1500 grains per square inch.

TABLE I: $\frac{w}{A} = 1500$

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
T	t	V_0	AVERAGE V (FOR a)	a RETARDATION	$d_1 = V_0 t - \frac{1}{2}at^2$	$V_F = V_0 - at$	$d_2 = \frac{1}{2}gT^2$
(Sec.)	(Sec.)	(Ft. per sec.)	(Ft. per sec.)	(Ft. per sec. per sec.)	(Feet)	(Ft. per sec.)	(Feet)
.10	.10	3000	2800	4100	280	2590	.162
.20	.10	2590	2430	3200	523	2290	.648
.30	.10	2270	2140	2650	737	2005	1.460
.40	.10	2005	1890	2200	931	1785	2.590
.50	.10	1785	1690	1800	1101	1605	4.050

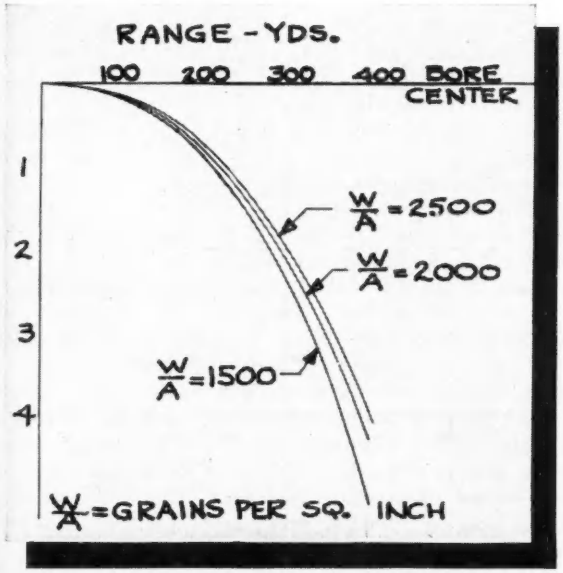


Fig. 5: Plotting drop, in inches, against range, of three bullets moving at equal velocity, shows that trajectories level off as sectional density increases

Column 1 is the elapsed time in seconds from the muzzle. Each set of figures in each column is a 'step' or an interval of time in the progress of the bullet's flight. Column 2 is the length of time of each interval (.10 second). Column 3 is the initial velocity at the beginning of each time interval. For example, the initial velocity of the first .10 second is the muzzle velocity. At the beginning of the second .10 second (or end of first .10 second) the initial velocity is 2590 f.p.s., and so on. Column 4 is the average velocity during each interval of time and is used to find the average retardation from Fig. 4. The retardation is entered in Column 5. The average velocity is approximated and can be checked, as will be shown later. Column 6 is the distance covered by the bullet in each time interval.

As we previously pointed out, the basic laws of mechanics tell us that the distance travelled by an accelerating object is $d = \frac{1}{2}at^2$. If the body is already in motion, the distance covered will be $d = V_0t + \frac{1}{2}at^2$. V_0 is the initial velocity and t is the time in seconds the acceleration a takes place. If the acceleration is actually a deceleration or retardation, as in the case of air drag on a bullet, the plus sign becomes minus, $d = V_0t - \frac{1}{2}at^2$.

In Column 6, obviously, if we use the retardations of Fig. 4, the values will be different for each time interval. Therefore, we figure the distance for each time interval and add to the distance in the previous segment of time. It is better to figure these in feet, then convert to yards by merely dividing by three feet.

Column 7 is where we get to the business of finding the drop in velocity as the bullet proceeds farther and farther from the bore. The change in velocity of an accelerated body in motion such as a bullet with air drag retardation is $V = V_0 - at$. The velocity is calculated for each interval of time and subtracted from the previous velocity. As was previously pointed out, the acceleration used in the calculations of range and

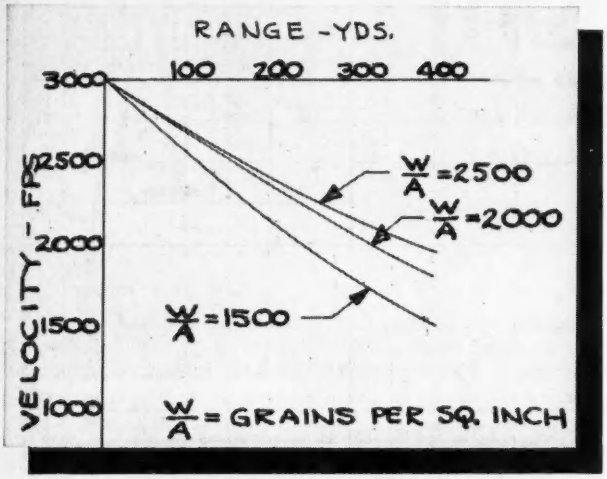


Fig. 6: Sectional density of a bullet affects rate of retardation. Velocity drop is greatest at higher velocities and lower sectional densities

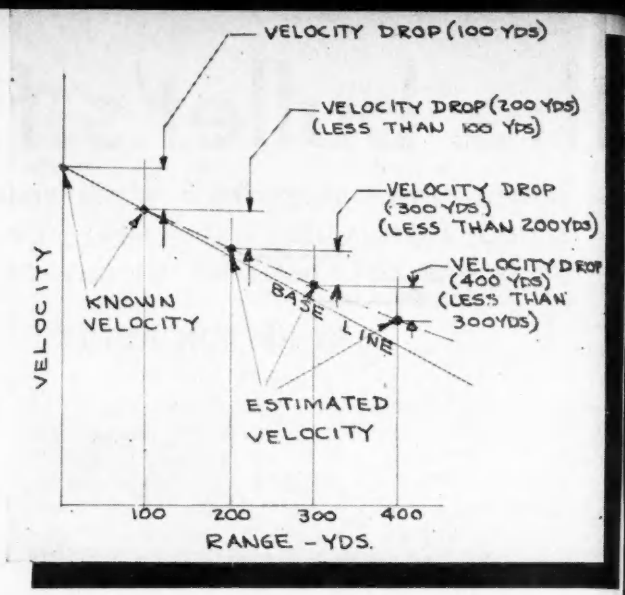


Fig. 7: Given only muzzle and 100-yard velocities, and knowing drop, bullet shape and sectional density, velocity curve of any bullet can be estimated

velocity is an approximation obtained from Column 4, or the average velocity between the initial velocity (Column 3) and the final velocity (Column 7). After having found a value for Column 7, the average velocity (Column 4) may be checked to determine if it is about halfway between the values of Column 3 and Column 7. If it is within about 20 f.p.s., there will be little to be gained in going over the calculation again. After a little practice it will be possible to run through it with sufficient accuracy and without repeating any time interval calculations. After the final velocity in Column 7 is concluded, it can be carried over into Column 3 to become the initial velocity for the next calculation.

Column 8 is the drop of the bullet below the bore center line. The law governing drop is the same as previously mentioned for distance except we merely use **g**, the acceleration of gravity, for the acceleration. Since the acceleration is always constant (32.2 feet per second per second) and the initial velocity is zero, we can use the elapsed time **T** instead of **t**, where the time was broken into small increments.

$$d_2 = \tfrac{1}{2}gT^2$$

It is now possible to plot some general curves showing the comparative performance of bullets of varying sectional density. Figures 5 and 6 show the trajectories and velocities against range for three bullets of sectional density 1500, 2000 and 2500 grains per square inch.

It is important to note that for sectional densities between 2000 and 2500, the difference in velocity drop and trajectory is much less than for sectional densities between 1500 and 2000. The energy of the bullet can be plotted against range also if the weight of the bullet is known. If the weight is not known, a general curve for any bullet weight can be plotted giving the energy in foot-pounds per grain of bullet weight. The kinetic energy is

$$E = \tfrac{1}{2}mV^2$$

$$E = \tfrac{1}{2}\,\frac{w}{g}\,V^2$$

Converting **w** to grains instead of pounds

$$E = \tfrac{1}{2} \times \frac{w}{7000\,g} \times V^2$$

$$E = \left(\frac{w}{14000\,g}\right) V^2$$

$$E = .00000221wV^2$$

A point that can be mentioned at this time is that the process in Part I (RIFLEMAN, July, page 11) can be reversed to derive bullet drag coefficients from published ballistic tables for application to the same shape bullet at different weights and velocities.

Fig. 6 actually represents more than a velocity versus range curve for a given muzzle velocity. Briefly, it represents the 'slow-down' of a bullet of this shape for the sectional densities shown for any muzzle velocity below 3000 f.p.s. For example, take the sectional density of 2000. If this bullet had a muzzle velocity of 2500 f.p.s. instead of 3000 f.p.s., we merely shift the range scale at the bottom to agree with a muzzle velocity of 2500 f.p.s. and the range, of course, at this point is zero instead of 155 yards as shown. One hundred yards then falls on 255 yards, 200 yards on 355 yards, and so on. We can also extend the useful part of the curve to higher velocities than 3000 f.p.s. by figuring the higher velocities and extending the curve to the left. This would mean starting the system of calculations, as in Table I, with a velocity greater than 3000 f.p.s. for the fastest loadings.

One thing to note on Fig. 6 is the gradual slope of the curves, which approximates a straight line. However, the curvature or slope of the curve at various range points is worth taking into account. Note that on Fig. 6 for sectional density of 1500 that the velocity drop in the first 100 yards is 450 f.p.s., while between 300 and 400 yards the velocity drop is 300 f.p.s. The thing to be observed is that the velocity drop is greatest at the higher velocities and at the lower sectional densities. To illustrate, the .220 Swift 48-grain bullet has the greatest initial velocity drop of any standard factory load. Reason, of course, is the high muzzle velocity of 4140 f.p.s. and the low sectional density of 1270 grains per square inch.

As engineers put it, some intelligent guessing can be applied to published factory load ballistics, which are usually

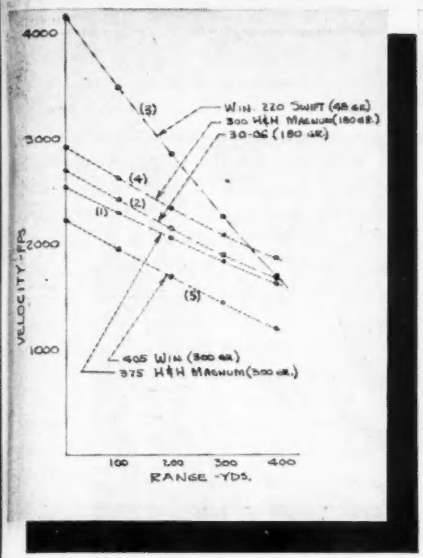


Fig. 8: Velocity curves over 400-yard range estimated from muzzle and 100-yard velocities

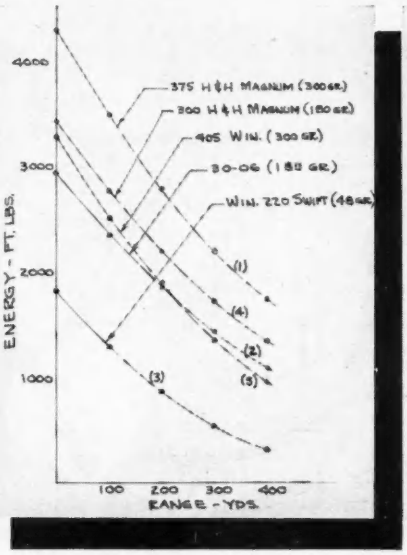


Fig. 9: Energy curves over 400 yards estimated from factory muzzle and 100-yard figures

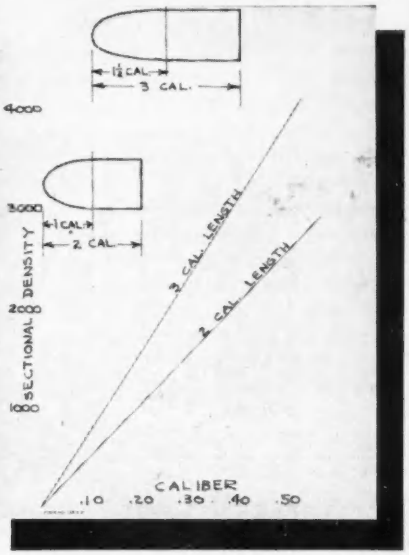


Fig. 10: For a given proportionate bullet shape, sectional density is proportional to caliber

given only at the muzzle and 100 yards, by plotting the type of curves in Fig. 6 in a quick but less fundamentally educational manner. Plotting curves also serves as a good comparison of various factory loads or any other loads where only short range data is known. Take the muzzle velocity and the velocity at 100 yards from the factory ballistics table and spot them as points on the velocity versus range chart. Draw a straight line (call it the base line) through the two points, then adjust the true points of the curve for greater ranges above the base line by taking into consideration the velocity drop, sectional density, velocity and bullet shape. Start at the left end of the curve and work to the higher ranges. Fig 6 will be a help in estimating the velocity drop for a given segment of range (such as every 100 yards). Since Fig. 6 is for the bullet shape in Fig. 2, a spitzer or boattail bullet will have slightly less velocity drop. Fig. 7 will illustrate how the factory data may be extended to longer ranges. After the velocity curve is plotted, a curve of energy versus range may be plotted for velocities at the corresponding ranges from the formula developed before.

Due to the gradual slope of the velocity curve, one simply cannot be far in error when estimating in this manner. Figs. 8 and 9 are curves of velocity and energy estimated for various factory loads. The velocities are based on factory data at the muzzle and at 100 yards. Following are the loads which are plotted in Figs. 8 and 9, and the weights and sectional densities of the bullets.

	Weight (grains)	*Sectional Density*
375 H&H Magnum	300	2730
30-'06 Springfield	180	2570
220 Swift	48	1270
300 H&H Magnum	180	2570
405 Winchester	300	2320

"Sorry! Gotta be on time for the NRA's Second Annual Convention, October 17-21" (See page 54)

It has been shown that the greater the velocity and the lower the sectional density, the greater will be the retardation of the bullet. By Fig. 10, then, we can also prove that sectional density is always increased (and the retardation or velocity loss correspondingly reduced) as the caliber of the bullet is increased for a given proportional shape of bullet. The reason is that sectional density $\frac{W}{A}$ is controlled by both the base area of the bullet and the weight. The area increases as the square of the caliber, while the weight increases as the cube of the caliber. The sectional density therefore is directly proportional to the caliber for a given proportionate bullet shape. On Fig. 10 are two shapes of bullets, one of two-caliber length and one of three-caliber length. The effect of long shape bullets may be studied here. For example, a bullet of three-caliber length will have a sectional density about one and one-half times that of a two-caliber length for the same caliber. It can also be seen that a small caliber bullet of longer length can have as high or higher sectional density than a large caliber bullet of short length. Once again, however, if comparison is made for the same caliber length and shape, the larger caliber bullet will always have the greatest sectional density—in direct proportion to the change in caliber as illustrated by the straight line graph of Fig. 10. Therefore, the only way to increase sectional density, after the best shape and caliber of length of bullet is chosen, is by increasing the caliber. ◆ ◆ ◆

In Part III we will study range testing and how the process in Part I is operated in reverse to compile information on bullet shapes and sectional densities and also to check preliminary design data of a new load after building a testing rifle.

"He was tremendous. The huge antlers looked jet black in the sunlight"

TOUGH CRITTERS!

BY ELMER KEITH

EUGENE E. WILKINSON of Beverly Hills, and the writer had been hunting elk for over a week on the head of the North Fork of the Salmon with poor success. Warm dry weather did not help the situation. Several times we had crossed big tracks in the damp spruce bottoms, and every evening for nearly a week I had an old bull answer my bugle when it was too dark to go after him. One night he serenaded us most of the night.

At daylight he was still answering, so I told Gene to get his .35 Whelen and we would go after him—he was not over a mile and a half away. We worked hurriedly across the spruce bottom and up the timbered edge of an old snow slide. Occasionally I would stop and bugle and rake a dead limb along a tree bole. It carried well on the still morning air, and soon I had two bulls, not one, answering. Both were high on the mountain, but the wind was down the slope so we climbed. Soon we spotted one bull and five head of cows and calves to our left. The bull would answer but would not come our way, as it was about the middle of October and the rut was long over. The glasses showed him to be a nice even six-pointer but no record.

As we climbed, the other bull, in dense timber to our left, decided to come our way and give the bugling upstart a lesson. He was the old chap that had answered me most of the night, and we could easily distinguish his bugle from the other. He was mad and charged out onto the open edge of the slide before he stopped to look. We were sitting under a big fir tree, and after one look I told Gene to take him. The bull was facing us squarely at 100 yards and at the crack of Gene's .35 Whelen he dropped on his nose and started kicking down the mountain. I asked Gene to bust him again since to me it did not look like a killing hit. Gene answered that he had hit him square in the chest and he would not get up. I begged him to shoot again but to no avail. Suddenly the bull raised on his hind feet, then came up on his front feet, and with a quick whirl he was behind

a big fir tree just as Gene shot again, hitting the tree. The bull was out of sight and gone before Gene could reload.

It looked to me like the bull had been hit in the neck, I told Gene, as in all probability he would have reared and turned from a chest shot. Careful tracking revealed a long six-inch hank of neck hair from the mane, proving my point, and bleeding had soon stopped, but by careful tracking we managed to trail the old boy to the top of the mountain and over into dense huckleberry brush and a maze of old elk tracks by one o'clock in the afternoon. Then, after two and one-half miles of trailing, we lost him.

A week later, after many miles of steep hard hunting, we topped out on a high divide. Below us lay a beautiful section of high mountain basin. After resting on a big rock, I produced the bugle and gave it all the steam I could muster. Instantly we had an answer from across the spruce-covered basin. It was a hoarse, deep-toned bugle, denoting an old bull. After fifteen minutes I bugled again. Instantly his challenge came back, then three more bulls started bugling from different points of the basin. We had a ringside seat to the most beautiful music in all the wild, a symphony of the wilderness. For another half hour, at intervals, I teased those four bulls in the most provocative tones I could muster. The old bull—a real patriarch, who had fought too many battles and was content to let the younger bulls do the fighting—started moving, getting farther away with each answer, but by this time one younger bull had traveled a mile across the basin to meet us. Gene and I set out at a jog trot across the wet meadows and deep spruce jungle. Each time we stopped I bugled again, holding the bugle down near the mud to make it sound farther away.

One younger bull answered us from the timber, not over 100 yards away, and Gene wanted to turn and look for him. I told Gene to forget the small fry—we were after the old bull, a real show. We passed up the young bull, also his two consorts, and kept on in the direction from which the old boy had last answered. After crossing the basin, and knowing we were within a quarter mile of him as he worked higher up the timbered slope, we stopped and I bugled softly again. He answered, not over a quarter mile ahead. We ran for 200 yards to the edge of a slide, then I bugled softly again. He answered from a little farther ahead. I asked Gene to work on ahead carefully and kill him, while I stayed put and coaxed on the bugle, but Gene would have none of it, saying he was afraid he would botch up the job or fail to see him. So we slipped across the slide and through another strip of heavy timber. We were now close and I did not bugle again but slipped ahead carefully, making sure I saw everything that was in sight. On rounding a big tree I caught sight of him walking slowly up the mountain. He was tremendous, the second finest elk I had ever seen alive. He had rubbed his horns on balsam fir and covered them with pitch, then horned the soft bog and uprooted small trees until the huge antlers looked jet black in the sunlight.

At 60 yards I asked Gene to shoot. His first shot was a clean miss and I saw rock beyond the bull smoke away. The elk stopped and looked, then Gene's second shot caught him high on the right hip. At the hit the old boy stopped and turned majestically, with his huge head held high, and started for us on three legs. I ran to the side, where I could keep him in view with my double rifle. A few small pines screened him partly from Gene, but he shot twice more before the bull could get behind the trees. I could hear him grinding his teeth, and when the hair raised up vertically on his neck and withers, I knew he would have to be stopped soon or he would be on Gene. When the bull was only two jumps away, he cleared the trees and Gene shot again, this time catching him square in the front of the neck. The old boy reared up to his full height, then went over backwards down the steep slope.

The elk rolled down into a small flat, then turned over and pulled himself along with his front feet. I asked Gene not to shoot but to watch him, however Gene had lost one elk so kept on firing. The elk proved a beauty, an even six-pointer with the heaviest beams I had seen on a living elk. The state tag would not clamp around the horns at any place below a fork, so I had to wire it on the antlers. Spread was around 47 inches and length of beam around 55 inches, but the weight and mass of those horns, also the extreme length of points from the main beam, was something to marvel at. Gene was the happiest human I had ever seen.

When skinning the old boy out, I found the killing 250-grain Winchester slug had struck the center of the neck, had blown up on the spine, and had stopped. A sliver of the lead core had entered the spinal cord between two joints of the vertebrae. The .35 Whelen had given that bullet 2700 feet per second velocity, instead of the 2200 feet for which it was made, and the construction of it was not up to the task. The bull was loaded on three pack horses and we packed the huge head on our backs, even after boning out the legs and neck to save weight. He was at least 25, probably 30 years, old from the wear on his tusks. He was too old to grow long antlers, but he carried size and weight.

Another time, Chink Clark and the writer were hunting elk on the Lochsa. We had crossed a basin of huge cedar trees, where visibility was less than 60 yards, and were starting up a steep slope when we saw a huge bull standing broadside. Chink raised his rifle and with a quick aim fired. At the crack of the .30-30, the bull whirled and ran behind a big cedar. By jumping to the left I could see one huge horn and half his rump going up the slope, so holding as close to the tree as I dared I gave him a 350-grain slug in the rump from my .400 Whelen. He reared up and came over backwards, driving his huge horns deep in the soft ground. Telling Chink we had better get above him, we ran to the left, hastily climbing the mountain as the old boy sorted himself out and gained his feet. He was clearly mad. We circled above a big fallen tree and watched him. Thinking my slug had penetrated on into the lung cavity, I was hesitant about shooting again. The hair raised up on the neck and withers of the bull and looking up the mountain, he saw us. Instantly his eyes brightened and he came up that steep slope as fast as he could on three legs with the left hind leg swinging at the hip. Chink started yelling for me to stop him, but I still thought he would go down from my first shot. He rammed into the fallen tree across his path, backed up and tried it a second and third time, in a vain effort to clear the log. It was about four feet high and he could not get over it on three legs. When he saw he could not get over the log, he started around one end of it, to come at

"They are game, intelligent beasts and, for my money, the finest of all the deer"

Going up against a determined bull elk is no game for the tenderfoot. This big fellow was photographed on the ranges of the Niobrara Game Preserve, Neb.

Packing out after a successful elk hunt. Keith, who has killed over thirty of the big animals, rates them as tougher and harder-to-kill game than moose

us from above. I told Chink to bust him in the back of the head with the .30-30. Chink replied that it would smash the skull, but I told him to go ahead. He fired and the elk collapsed. However when I skinned out that fine head, I found the 170-grain .30-30 from a 26-inch model '94 Winchester had penetrated only halfway through the skull and stopped in the bone. However, on cleaning the brain pan, I found a blood clot. It killed like a blow by a hammer, but the bullet would not even penetrate the skull at a range of ten yards or less. He was very old, with ivory tusks worn down to the gums, probably at least 30 years of age. The head was massive with seven and eight points, a 53½-inch spread, but short, only 50 inches, in length of beam. I later found two 170-grain .30-30 slugs and one 220-grain .30-caliber slug in his meat besides a string of scar tissue through the neck and one through both lungs.

During a lifetime of guiding and hunting, I have seen many wounded elk turn on the hunter. They are a game beast, more intelligent than deer and, for my money, the finest of all the deer tribe. Even the cows are game. I still remember a cow elk, with her spine broken between the hips, that pawed herself toward us with her front feet, gritting her teeth and the hair on her neck standing on end. A second 350-grain slug through the brain ended her life.

In 1919 I had dropped a huge bull by a side neck shot at 70 yards with a 220-grain bullet in a Springfield. He had slid down the steep mountain in deep snow until his head was covered. Foolishly, I prodded him in the top of the withers with the muzzle of my rifle. It was like prodding a dynamite cap. He simply exploded out of the snow, catching me on his brow points and throwing me thirty feet down the mountain. I lost the rifle and landed on my back, my left arm numb and useless from hitting a log under the snow. The bull was jumping up and down with his feet bunched, like a buck deer killing a snake. Evidently he thought I was under him, but when I drew and cocked my single-action Colt .38-40, he stopped and looked down at me. My first slug caught him squarely between the eyes, but it was a Remington soft-point and the slug merely flattened on his skull. Alternated in the cylinder with the Remington soft-point loads were my own heavy black-powder handloads. The bull shook his head and came for me. When he hit the snow from his first jump, I shot again, catching him a trifle low for the brain but dropping him like a hog. His head again went deep under the snow as he slid down against me.

I then found the rifle, cleaned the snow out of the barrel, reloaded the sixgun, and walked around behind the fallen elk. To make sure he was dead, I prodded him in the rump. He lashed out with both hind feet, knocking me end over end down the slope and jumped up, starting to run off. I drew the old sixgun even as I went down—I had again lost the rifle—and my first slug struck the high sword point of the left horn, the next two lodged each in a ham, and the fourth broke his spine between the hips. Then he turned and pawed himself back toward me with his front feet, all the time gnashing his teeth. I waited until he was close and broke his neck just under his chin with one of the heavy handloads.

After that experience, I swore off the .30-'06 for elk and went back to the old Sharps with excellent results. However in 1924, my family had moved to Idaho while I was at Camp

U. S. Fish & Wildlife Service (2)

Perry on the State rifle team. Father wanted me to go elk hunting with him, but my good Sharps rifles were still in Montana and I had only a Springfield Sporter brought home from Perry. Too, I had but eight 150-grain Remington Bronze Point game loads and a quantity of six-degree boattail National Match ammunition with hard points, but elk hunting we went anyway. A big hunting party, we had landed but two deer, which we ate, in ten days hunting.

Bill Riley had wounded a deer every day or so and lost it with his .25-35 Winchester carbine, so I decided to tail him for the rest of the hunt. Coming out on top of a ridge, we heard logs and brush crashing across the canyon from us and soon three bull elk came in sight at 200 yards headed up the opposite slope. I asked Bill to refrain from shooting with his pop-gun so I would get meat for all of us. Knowing well the 150-grain Remington loads would not penetrate deep, I held right over the root of the tail on the first bull and dropped him with a shattered rump. He rolled down the mountain out of sight. My second shot caught the next bull in the same place and he dropped but regained his front feet and flounced around broadside, so I gave him one in the heart which finished him. By this time the third bull had not only gained the opposite ridge but gone down it until he was over 300 yards away. He stopped broadside. Being in excellent training, I put my five remaining 150-grain Remington Bronze points in behind his right shoulder. I had to reload for the last two. Riley could stand it no longer so he emptied the .25-35 carbine and we heard his last two strike the bull. The elk merely humped up from those seven hits, then turned around and faced us. I slipped a clip of the National Match stuff in my rifle and hit him at the base of the neck, which killed instantly.

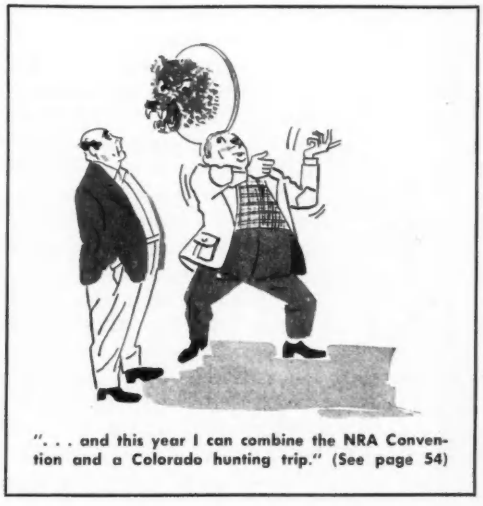
Then we simply fell off the mountain into the gulch to see what had become of the first bull. He was very much alive, there in a small open space, some 30 feet across, surrounded by willows and alders. As his rump was shattered we decided to kill him with a club. I had four full-patch loads left and Riley had only two for his carbine, and we were a long ways from camp in good bear country. We cut a heavy fir cudgel and took turns pounding that bull between the horns as hard as we could swing —to no avail. He simply could not be killed that way. Riley was very husky, weighing 180 or more. We decided to cut his throat. I had bulldogged steers that were heavier than the elk, and had four good legs under them, so I anticipated no great trouble. However, with only two front legs to drag himself the bull proved more than a match for the two of us, and he repeatedly threw us both over his head into the willows. Older hunters would have had more sense than the two of us combined, but once aroused we determined to finish the job and save our few cartridges. Finally we hit him from both sides at the same time, and I managed to cut his throat with a long slim-bladed jackknife. Only the spine and the skin and top muscles held his head in place.

Clark (right) and the author with the elk that repeatedly tried to attack after having been wounded by Keith's first .400 Whelen slug. When he skinned the elk, Keith found three old bullets in him, plus evidence of other wounds. Another elk had to be beaten to death.

It was surprising how fast and active that wounded bull was with only his front feet for locomotion. Once he caught Bill and heaved him into the brush with his antlers, where he could only yell for me to shoot. Grabbing his carbine, which was near, I shot the bull in the head just as he heaved Bill into the air. My shot was too low for the brain and did no apparent damage at all, though the 117-grain slug entered the skull just below the brain pan. We finally dogged that bull again and twisted his horns until his neck broke.

One fall, during the elk season, a puncher riding for cattle in Montana jumped a big bull elk. As he was riding a top roping horse and had a sheath knife with him, he decided to rope and hog-tie the bull, then cut his throat. If he had only had a partner along, all would have been well. Dropping his loop over the huge horns and head, he turned the bull a somersault easily enough, but the elk was back on his feet before the puncher could get to him and promptly gored and killed the horse. The rope was run through the fork of the saddle and there was a loop over the horn, so the elk was tied hard and fast. However, that 7/16-inch hard-twist did not hold him long, and he soon broke it and departed trailing the broken throw rope.

For me, at least, elk have always proven much harder to stop than moose. The same has been true for men I have guided. If the first shot was placed right, and an adequate cartridge and bullet used, all was well; but if not, trouble often ensued. Many times hunting parties I have guided have trailed wounded elk for miles. Some we finished and some got away. During some 30-odd years of guiding and hunting, I have seen over 200 head of elk killed and have killed 31 head for my own use. Though I have lost but one elk from my own shooting, due to a bullet failing to expand, and found what the coyotes left of it next day, many wounded by sportsmen whom I was guiding have gotten away. ◆ ◆ ◆



". . . and this year I can combine the NRA Convention and a Colorado hunting trip." (See page 54)

this stuff, gunpowder

BY JULIAN S. HATCHER

Knowing your materials is half of any 'make-it-yourself' problem. Yet few handloaders have even a casual knowledge of the explosives with which they work.

No one among American 'gun editors' has written more lucidly or simply of such basic subjects than has the RIFLEMAN'S *technical editor. This article, written by Julian Hatcher in 1933, is far too good to lie forgotten in* RIFLEMAN *files. Rewritten and brought up to date, it now becomes a logical part of the* RIFLEMAN'S *series on handloading ammunition. A second article, to be published next month, will complete Hatcher's basic survey of gunpowder facts with the composition of modern sporting and military powders. This will be followed by a never-before-published series of comparative photographs showing (to exact scale) all of the popular reloader's powders and describing the types of loading for which each was developed.*—ED.

THE word 'powder' as applied to military propellants is an interesting example of the way in which a meaning can be changed. 'Powder' originally meant, and still does mean, fine dust; yet at the present time we find substances called powder which do not in any manner resemble dust and which are not even finely divided. For example, cannon powders are ordinarily made in big grains several inches long and perforated with longitudinal holes; or flat strips an inch wide and a foot or more long, or even in tubes 4 or 5 feet in length.

The word 'powder' was first applied to propellants for use in firearms because the earliest propellant was a black dust or powder composed of ground-up charcoal, saltpeter and sulphur.

The reason this mixture explodes when ignited is because it contains two fuels, charcoal and sulphur, which are very inflammable, and in addition, another solid substance which when heated gives off large quantities of oxygen.

If you mix charcoal and sulphur together without the saltpeter, you have a black substance which looks in all respects like the primitive gunpowder described above, and if you light it, it will burn, provided you supply plenty of air to support the combustion. The oxygen in the air enters into combination with the charcoal to form carbon dioxide gas and with the sulphur to form sulphur dioxide gas. However, there is no explosion because these gases can be formed only as fast as air can be brought into contact with the burning powder to supply the necessary oxygen for the combustion. In other words, this mixture of sulphur and charcoal is a non-explosive powder.

Now, when we mix powdered saltpeter with it, we change its nature so that it becomes an explosive. The instant it is lighted it burns all at once without waiting for any air to come into contact with it. This is because the saltpeter is very rich in oxygen, which it gives up when heated. Thus the gunpowder supplies its own oxygen for combustion from within, and can burn without any outside air.

As nearly half the products of combustion of gunpowder are gases which occupy a great deal more space than the solids from which they were evolved, it is evident that the combustion of gunpowder results in a sudden expansion from the space occupied by the original powder, to the

much larger space occupied by the gases which are given off. It is this sudden expansion which causes the gunpowder to exert force when it is ignited. The heat of combustion adds to this effect because hot gases occupy more space than cold ones.

Black powder relies for its explosive properties upon three qualities which are typical of all explosives. First, when ignited it will burn by itself without aid from the outside air, and this burning is very rapid. Second, in burning it gives off a large amount of gas. Third, a considerable amount of heat is also evolved.

To be successful for use as an explosive, a substance must possess all three of these qualities. We have seen above that there are substances which can be burned and will give off a large amount of gas and heat, such as the mixture of charcoal and sulphur, but they do not burn without the aid of the outside air and consequently they do not burn rapidly enough.

We do have substances that will burn without the aid of outside air and burn rather rapidly, but they must also give off a large amount of gas or there is no explosion. Thermite, which is a mixture of oxide of iron and aluminum powder, will burn rapidly without air when ignited, and gives off great heat, but it does not give off any gas, and therefore there is no explosion.

Even though a substance can change from a solid to a gas without the addition of oxygen from the outside air, there will be no explosion unless the change involves the liberation of heat. Some substances change into gas rather rapidly, but in doing so, instead of giving off heat they take up heat. Substances such as these do not cause an explosion when they decompose because as soon as they have started to decompose, they chill the surrounding air so much that the action comes to a stop until more heat can be supplied.

A very familiar example is the 'dry-ice' in which ice cream is often packed. This is solid carbonic acid gas, and it can exist in solid form only at an extremely low temperature. When dry-ice is exposed to air it begins to give off great quantities of gas, but in giving off this gas it absorbs all the heat around it so that the gas can be evolved only as fast as the heat is supplied. Thus you can lay a big chunk of dry-ice on a hot stove and it will sizzle, hiss and jump around for a long time but there will be no explosion.

The backbone of gunpowder is the substance which gives off oxygen, and that is the saltpeter.

No doubt the original invention of gunpowder followed the discovery that when saltpeter is thrown into a fire, it crackles, hisses and makes the fire burn much more brightly because of the oxygen it gives off. Then by mixing this saltpeter with inflammable materials, it was found that extremely hot fires could be made when the mixture was ignited. Finally, no doubt, the proper combination was obtained so that when one of these mixtures was ignited it went off with a real explosion.

The actual discovery of gunpowder is variously ascribed to the Hindus, to the Chinese, to one Berthold Schwartz, and to Roger Bacon, a German monk who seems to have described its composition in a manuscript written in 1249.

Whoever was the true inventor of gunpowder, guns and cannon were known before 1350 A. D. From this time until the discovery of guncotton in 1846, black powder was the only explosive commonly known and used.

The average composition of black powder is saltpeter 75 parts by weight, sulphur 10 parts, and charcoal 15 parts. There is, however, quite a wide variation in compositions that have been used in different years. Powders used for blasting, for example, are more effective if they do not operate quite as quickly as the ordinary gunpowder. This is for the reason that in blasting it is desired to rend the rocks and tear them out in chunks rather than to break them up in fine pieces, which a stronger powder would do. The average blasting powder would have about 70 parts saltpeter, 14 parts sulphur and 16 parts charcoal, but some powders of this kind have been made with compositions as low in saltpeter as 40 parts, with 30 parts of sulphur and 30 of charcoal.

The speed of burning of black powder, and therefore to a certain degree its strength, is controlled by the size of granulation. Powder with extremely large grains burns more slowly than a fine-grain powder, and therefore is less sudden in its action. Also large-grain powder is much harder to ignite.

As the size of the granulation decreases the strength of the powder increases up to a certain point. However, when a powder is made very fine, like dust, the speed of burning is again reduced because all the spaces between the grains are filled up and hence there is no way for flame to communicate itself rapidly and ignite the whole charge at one time, as would occur with powder of larger granulation. Powder with very small grains is the easiest to ignite, however, hence this kind of powder was used for priming charges in muzzle loaders.

In the manufacture of gunpowder the three ingredients are ground up very fine and then mixed together in a machine, after which the mixed material is given 2 or 3 per cent of moisture and put through a process known as incorporation. This is the most important process in the manufacture of black powder, its object being to bring the ingredients into the closest possible contact so that each particle of the resultant 'cake' shall be composed of the three ingredients in the proper proportion. This incorporation is done in a mill of the edge-roller type, which is a circular plate on which two massive rollers move round and round in circular paths.

After the incorporation, the 'cake' is broken into lumps of uniform size in a machine with two pairs of grooved cylinders, arranged one pair above the other. The product of this breaking-down machine is called 'powder meal.'

In order that the powder may be granulated, the powder meal is first pressed into compact cakes, called press-cakes, which is done in a hydraulic press. The press-cake is broken up into grains by passing it through a granulating machine consisting of a series of pairs of metal cylinders with teeth of suitable size and suitably placed on the surfaces of the cylinders. There is a screen under each pair of rollers to catch the broken press-cake and conduct the large pieces to the next set of rollers.

After this granulating process, the powder is separated by a series of screens into grains of different sizes. The last process is polishing, which consists of placing the powder in a wooden barrel and revolving the barrel for 5 or 6 hours. This removes all the sharp corners and produces a hard, glazed surface. Usually a bit of graphite is included to give additional polish.

Black powder as at present made and sold to the trade comes in irregular, shiny, metallic-looking black grains designated as to size by the letters Fg, FFg, FFFg, etc.; the more F's, the finer the grain. There is also a special granulation used in the Army for saluting purposes called Grade A-1. I have often been asked just what these different designations mean as to size. This is a difficult question because the designations vary with the different manufacturers; but taking the duPont Company's system, the values would be as given in the table below.

The powders are measured by screening them through a coarse screen which catches all the very large lumps, letting the rest fall onto a very fine screen which allows all the very

fine powder to pass through. The screens through which the different grades of powder must pass, and those on which they must be retained, are given in the table, the figures representing the number of meshes per inch in the screen.

Size	*Must Pass*	*Must Be Retained On*
Grade A-1	6	10
Fg	14	16
FFg	16	24
FFFg	24	46
FFFFg	46	60

The discovery of nitroglycerin in 1846 opened a new field of explosives. Nitroglycerin is one of the strongest explosives known, and is the basis of many modern explosive compounds. It is a colorless, oily liquid formed by the action of nitric and sulphuric acids on glycerin.

Nitroglycerin differs from gunpowder in that it is not a mixture of fuels and oxidizing agents; instead, it is a chemical compound containing a large amount of oxygen, and this chemical compound is capable of rearranging itself into more stable compounds which are gases. A sharp shock will cause this rearranging process to start, and when once started it spreads almost instantly throughout the entire mass, thus resulting in a violent explosion.

Years ago when nitroglycerin was first invented, it is said that a promoter tried to get miners interested in its use, but they looked with suspicion upon this soupy substance as an explosive instead of the commonly-used black powder with which everyone was thoroughly familiar. Finally in one little frontier mining town the agent ran out of money and could not pay his hotel bill. The proprietor of the hotel took, as security, his suitcase containing several quarts of nitroglycerin. Apparently the salesman's claims for the explosive properties of his stock-in-trade had not made a great impression, for the suitcase was allowed to stand for some months in the upstairs hall, where the bootblack used it for his customers to rest their shoes on while they were being polished. Finally this gentleman noticed that some red smoke was coming out of the suitcase, and reported this to the proprietor, who then remembered that the man who left the suitcase had spoken about an explosive. It suddenly occurred to the proprietor that it might be dangerous to keep a suitcase of explosives in the house, so he promptly carried it to the back window of the hall and threw it out into a vacant lot. Now a two-story fall is not good for any nitroglycerin and it is especially bad for nitroglycerin which has had its temper considerably sensitized by partial decomposition. The result was that the suitcase exploded with a detonation which shook the entire neighborhood, and blew the back out of the hotel.

Nitroglycerin is inconvenient to use by itself as it is subject to leakage, and thin films of nitroglycerin leaking out on the outside of containers are subject to friction which might easily cause disastrous explosions. Moreover, pure nitroglycerin is inconveniently sensitive. It was soon found that unless something could be done to overcome these disadvantages, nitroglycerin would never attain great popularity as an explosive.

The difficulty was finally overcome by the discovery that nitroglycerin absorbed into a porous substance made a much safer and more convenient explosive than the pure nitroglycerin. One of the most successful methods of using it was to allow the nitroglycerin to be absorbed in a porous earth called Kieselguhr. Nitroglycerin absorbed in a porous substance of this kind is called dynamite.

Another powerful explosive which, like nitroglycerin, is a chemical compound and not a mixture, is guncotton. This is formed by the action of nitric and sulphuric acids on cotton or any other kind of cellulose. Hence we often hear the term 'nitrocellulose' used instead of 'guncotton.' Guncotton has the quality of burning with extreme rapidity. It is said that it burns so fast that if some black powder grains are laid on guncotton and the guncotton is ignited, it may burn out from under the black powder grains without setting them on fire.

Some chemical students are said to have played a joke on their laundress by nitrating a handkerchief by soaking it in nitric and sulphuric acids. After the process the handkerchief looked just the same as it did before, the only difference being that it was then a guncotton handkerchief. They then sent it to the laundress. When she touched it with a hot iron it simply disappeared. The students were much amused at her agitation when trying to explain where the handkerchief went.

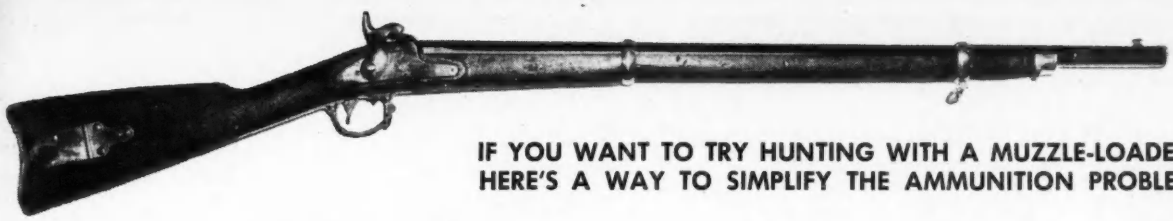
Guncotton is much too quick in exploding for use in guns. At first, attempts were made to use it in this way but they always resulted in bursting or damaging the firearm. It was finally found that by mixing nitroglycerin with guncotton a double purpose was served. First, here was a substance to absorb the nitroglycerin the same as the Kieselguhr does in dynamite. Second, this same absorbing substance was itself a powerful explosive.

Various different explosives are formed in this way. One such explosive is the English smokeless powder, Cordite, which is extensively used in Great Britain. It is composed of 37 parts of guncotton, 58 parts of nitroglycerin and 5 parts of vaseline.

Another explosive formed by mixing guncotton and nitroglycerin is blasting gelatin. This mixture is a very fortunate one chemically, because guncotton contains insufficient oxygen to turn all of its carbon completely into carbon dioxide, while nitroglycerin has too much oxygen. By mixing the two substances in proper proportions the excess of oxygen in one explosive balances the deficiency in the other.

It will be remembered that gunpowder is merely a mixture of two fuels and one oxidizing agent, whereas guncotton and nitroglycerin are definite chemical compounds. Such compounds in general explode more violently than simple black powder, and are known as high explosives. Moreover, there is a big difference in the manner of explosion of a high explosive as compared with that of black powder. When black powder is ignited it burns with great rapidity, giving off a large volume of gas, and this burning is the only explosion that occurs. On the other hand, many high explosives such as guncotton, nitroglycerin and TNT can be burned without causing any explosion at all. A stick of dynamite, for example, can be cut up and thrown into a fire bit by bit with very little danger of exploding, though each piece will burn rather intensively.

What these explosives need to cause them to exert their full power is a shock which starts a chemical rearrangement of the molecules into gas instead of solids. This chemical rearrangement is called a 'detonation.' Once a detonation is started in a high explosive, it spreads through the entire mass with a sort of wave action of great rapidity. The speed of detonations varies in different explosives, but in some it is as high as 7000 yards in a second. A detonating fuze consisting of a long thread of TNT encased in a lead covering will thus set off almost instantly a number of different charges of explosive, separated by considerable distances, if a detonating cap is exploded at one part of the fuze. Ordinarily the detonation of high explosives is started by exploding a blasting cap in contact with them. These blasting caps contain fulminate of mercury, a substance that explodes with great suddenness and which seems particularly well adapted to producing detonations.



IF YOU WANT TO TRY HUNTING WITH A MUZZLE-LOADER, HERE'S A WAY TO SIMPLIFY THE AMMUNITION PROBLEM

COMBUSTIBLE CARTRIDGES

By BEN F. HARDAWAY

THERE IT STOOD in my gun rack—my 'new' Civil War rifle, with its proud reach of barrel and bayonet gleaming after I had carefully wiped off its eighty-year-old coat of cosmoline and dust. It demanded in a voice audible to any 'soft-coal' enthusiast to be taken out and fired.

I had Minié bullets from the Ideal mold, Fg black powder, musket caps, and a 70-grain measure made from half-inch copper tubing with a tight cork sliding in it for adjustment. A few minutes' drive took me to an area where the 490-grain slugs would not endanger people nor the roar of the discharge annoy them.

"Wham!" she bellowed, giving me a satisfying boot with her hind foot.

"This is a *man's* gun," I said to myself. "Let's do this some more." But right then the trouble started.

I had noticed a slight grating when I had shoved the first slug home, and recognized it for the grinding of powder against the sides of the bore by the descending bullet. This time there was even more powder sticking to the fouling from the first shot, and, of course, the clearance was reduced by the amount of that fouling. By the fifth or sixth shot, although loading was still quite possible, it was thoroughly unpleasant to a person used to the smo-oo-oth descent of a Kentucky-style patched ball. And I disliked the idea of an unpredictable amount of my powder charge being ground up and deposited in the bore as a sort of negative lubricant.

The answer to the problem was obvious: the powder must be deposited at the bottom of the bore without touching the sides. But how? The idea of using a long funnel suggested itself, but I flatly refused to carry a 40-inch tube about with me in the woods. Then it dawned on me that I was in a sense retracing a path of development already traveled by my ancestors. What solutions did they use when these weapons were standard?

Combustible paper cartridges for muzzle-loaders are not new. These examples, from NRA collection, were for use in Civil War revolvers

The Civil War paper cartridge would be of no use—after tearing or breaking open the case, one must still pour the powder down the muzzle. Only a short distance farther along the path of development, however, brought me to the combustible paper cartridge, inserted entire into a weapon. It was widely used in revolvers when cap'n'ball was the rule.

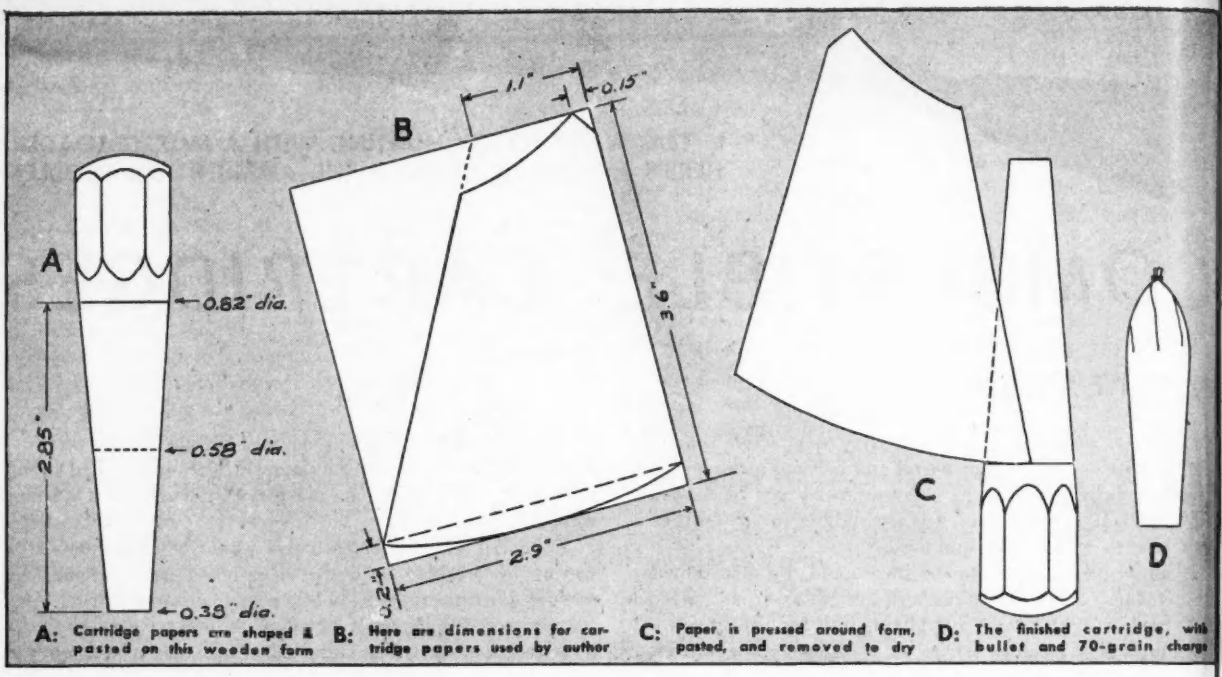
"Jack, I think I have the solution," I said that evening to a friend who owns a twin to my rifle. Between us we worked up a cartridge.

First, with knife, plane and sandpaper I made a tapering maple form for the paper case, of the shape and dimensions of sketch A (next page). Since the cartridge was to be loaded intact, the strong taper is desirable to insure that the paper case will burst upon reaching the breech-plug, thereby spilling out the powder to fill completely the space behind the bullet. It is also essential, if the paper case is to burst, that the powder charge be packed tight within it. For this reason, a different-sized form must be used for each different powder charge. The illustrated size and shape is for 70 grains. After I finished shaping the maple form, I heated it moderately in the oven and rubbed it with paraffin until it would absorb no more, to prevent paste from sticking to it.

I experimented with several different kinds of paper before I settled upon "onion-skin" typing paper as the best for combustible cases. It has much of the strength and toughness of bond but, being thinner, will burn more quickly than bond. The sheets of onion-skin should be soaked for a minute or two in a nearly saturated solution of potassium nitrate, then laid out flat to dry. The nitrate will assure complete combustion of the paper when the load is fired.

I tried several shapes, also, of paper blanks to be rolled into cartridge tubes, finally deciding that the pattern in sketch B (next page) was easiest to roll and gave the strongest tube, because of the spiral seam. Once I had decided on the shape, it was easy to cut a plexiglas (or tin) template from which the shape could be transferred to a stack of onion-skin paper. Then the blanks can be cut out with scissors half a dozen at a time.

Now I was ready to roll tubes. I found it was much like rolling cigarettes: the first dozen or so are the hardest. I discovered that a paste solution thin enough to be daubed with a small camel-hair brush, along one edge of the paper blank, works best. If the acute angle of the pasted blank is held down with the left thumb as shown in sketch C (next page), the fingers of the right hand can twirl the blank into finished



A: Cartridge papers are shaped & pasted on this wooden form. B: Here are dimensions for cartridge papers used by author. C: Paper is pressed around form, pasted, and removed to dry. D: The finished cartridge, with bullet and 70-grain charge

shape in one spiral motion. Then I tuck in one side of the paper projecting past the small end of the form, daub it with the paste brush, and pleat the other sides down upon it. If the paste is of the proper consistency, the paper will stick down and the tube can be carefully lifted off the form and set on end to dry.

I have found it worth while to prime the cases at this stage, by coating the small ends with paste and sprinkling with priming powder or meal powder. This is really a precautionary measure designed to insure quick and positive ignition; for deer hunting, for example, in which a whole season's hunting depends on one shot.

One of the obvious advantages of a cartridge such as this is that lubricated bullets can be used, to prevent leading and to make loading easier. I use a mixture of about four parts of paraffin to one part of vaseline, poured around the bullets, which have been up-ended in a shallow pan.

The bulk of the work in making paper cartridges is over now. It remains only to pour the proper charge into each tube, settle a bullet down firmly and squarely on the powder, twist the open end of the paper tube around the point of the bullet, tie it with a double turn of small string, and cut the end off close. The finished product then looks like sketch D. It fits properly in the Army Civil War cartridge box, or can be carried in a pocket.

The proper way to load with these cartridges is to insert one in the muzzle as far as finger and thumb can easily push it. Then the same two fingers pinch the crimped end and tear it off around the muzzle. The more fouled the bore, the shorter distance the cartridge can be pushed into the bore; thus automatically adjusting the amount of paper patch that fills the space between bullet and barrel. In all cases, however, the cartridge will ram home smoothly and easily, with one stroke of the ramrod. One should be sure to feel, at the end of the ramming stroke, a hesitancy and then a slight crunching as the paper case ruptures and allows the powder to fill the bore.

A word of caution should be inserted at this stage. There is always the possibility, however slight, of a lingering spark or fragment of smouldering paper remaining in the bore after a cartridge has been fired. If this should happen and a fresh cartridge is rammed home on it too soon, the shooter may have the nerve-wracking experience of premature ignition. It is no fun to have a bullet *and* ramrod whiz past one's ear—or worse. If time allows, a moist patch pushed once through the bore between shots will guard against any such possibility and also help to prevent the accumulation of caked-up fouling.

The combustible cartridge is, I believe, easily adaptable to other muzzle-loaders as well as Miniés, and to round balls as well as cylindrical. Its manufacture is a little tedious, but most black-powder lovers will welcome a chance to putter for an evening in recreating a recognized accessory of muzzle-loading shooting. And I have found it to pay off in increasing rapidity of fire, in the accuracy of leisurely-measured charges and in cutting down the number of gadgets to be carried on a hunting trip.

NEXT MONTH *Headlining the September issue, the gunmakers of Denver . . . the story of Schoyen, John P. Lower, Carlos Gove and the Petersons . . . a study of the men who made Denver one of America's great centers of fine gunmaking, by James E. Serven. For the handloader, data on the old favorite .30-30, 'by popular request', and the conclusion of Julian Hatcher's simplified article on gunpowder facts. Handgun expert Charlie Densford will discuss slow-fire pistol shooting, and for smallbore men who are already thinking about the start of the 1949-'50 gallery season, a provocative article that seems to prove that scores improve if you have the noise of a B-24 to keep you company. Finally, Maj. B. R. Lewis on the end of gun collectors' mystery, and the conclusion of Peyton Autry's ballistic series.*

SOME TIPS ON THE IDEAL OUTFIT FOR THAT HUNTING TRIP . . . FROM ONE WHO HAS BEEN THROUGH THE MILL!

So You Want to Go Light!

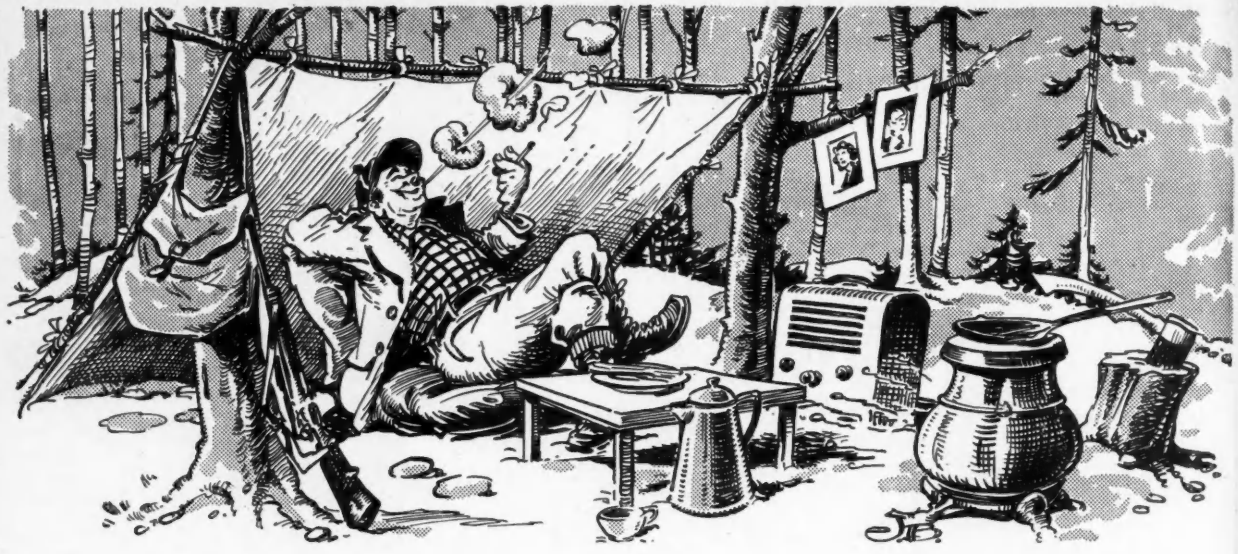
By BUD JACKSON

SOME OF THE FINEST wit coming within the ken of my personal observation has been delivered by friends when I've been sorting and packing my gear preparatory to my annual big-game hunt. The process of searching for the perfect harmony of lightness yet completeness invariably is the signal for a horde of relatives, neighbors and acquaintances to descend upon the den.

The-Lady-Who-Cooks-at-My-House delivers herself of the comment that she seldom knows, from the look of my room, whether I am just leaving upon, just returned from, or still engaged in, my hunt. Wiseheimers from the community drop by to inquire, cutely, 'when the safari starts' or 'how many fellows are you packing for?' Kids stand around getting in the way, pawing equipment, disordering careful assortments and scattering gear here and there. The wife's church circle troops by the door on its collective way to the powder-room, pausing with clacking tongues as females are wont, exclaiming over the 'horrid old guns' and commiserating with the 'lovely little deer' (bear, elk, antelope and what-not) which they 'wouldn't have the heart to shoot'.

These irritations could be more easily brooked if one weren't faced with a real dilemma—whether to go burdened with all the conveniences of civilization, and stagger 'neath the load, or to take a light pack and suffer some deprivations? No one, as far as I know, has struck the absolutely perfect medium, though many have long sought it. Yet, over the years, I've devised a reasonably light collection which, for me, serves all the vital purposes.

It has been arrived at by the simple expedient of making annual check-lists of my gear, then pausing at day's end to mark upon the list the number of times each item was used that day. Gradually, I weeded out unnecessary things which



went along for the ride without serving any real purpose. Further lightening has been my practice of making an item serve two or more purposes.

In this latter connection, for example, where I formerly wore a wrist compass and carried a sheath knife, I now carry a knife which has a small but accurate compass mounted in its handle. Similarly, I once took both a hand ax and a sheath knife but I shaved load and weight by acquiring a somewhat larger sheath knife which can, in emergency, be used to cut down sizeable trees, split kindling, hack through a fallen elk's brisket and perform sundry other chores.

I've long followed the practice of carrying into the woods with me a small waterproof match case and a vial of salt. (If you've gone long without salt, you'll know how important a commodity it is in the woods.) Now, I've a match case containing in one end a small hoard of matches, in the other a compartment for salt.

Until I had my shooting glasses ground to my particular correction, I usually carried two pair. Having the operation performed eliminated one pair. Again, I carried binoculars with me for years until I realized that a monocular would serve me as usefully—and much more lightly. This, of course, is not necessarily recommended for the average chap. I happen to have lost, in my youth, the vision of one eye so a monocular is all I need.

I still carry some unnecessary items. Years ago I read some paragraphs on pack tripping, written by a very wise and understanding man. His name now escapes me but his suggestion will never be forgotten, for he advised the man who is depriving himself in order to go light to carry one or two luxury items. These totally needless things, by their very frivolity, relieve him of feeling he has left all comforts behind. I've practiced his preaching for many reasons. He had something!

My equipment may be divided into three classifications—clothing and bedding as number one, hunting and photographic supplies as number two and general gear in number three. Here's what will be in Category One the next time I go into elk country:

Light waterproof down sleeping bag, air mattress inserted
Two sets wool underclothing, shirts and drawers
Two red bandanna handkerchiefs
Two pair close-woven, rain-resistant hunting trousers
Two red wool shirts, heavy duty
Lightweight rain-slicker
Four pair heavy wool socks, pre-shrunk
Reversible hunting cap, furlined ear flap
Pair fur-lined shooting mittens
Pair lightweight, waterproofed leather hunting boots
Down hip-length jacket

The sleeping bag and air mattress are musts, in my book. The bag uses less space and weighs less than its equivalent in blankets; the mattress is worth its minor extra weight for its contribution of comfort. Bedding I will not skimp upon, for good rest is imperative to good wilderness living.

Wool clothing is another must. I carry spares of everything against the wettings which are all but inevitable. Wool dries quickly, is not as uncomfortable in unseasonably warm weather.

The tyro may wonder about the red handkerchiefs but if he's ever seen a deer dashing through heavy cover, flicking his flags, he will understand. Even in back country you'll find fool gunners who shoot at anything that moves. If it shows a flash of white (such as might be shown by a man blowing his nose on a white hankie, or such as a buck might show when he takes off in alarm), there are some clucks who'll shoot first and then swear they saw horns. Red is good insurance.

I may seem to go heavy on socks but I wear two pair with boots, thus with four pair have only one complete change. I do not carry spare boots but I see to it my boots are in top repair when I leave. I keep them thoroughly oiled, as waterproof as leather can be made. Then, when they get wet, they can be dried out before the fire at night. Well-impregnated boots usually dry flexible even after heavy soaking. When damp, they are not too uncomfortable with two pair of heavy socks.

The slicker, folded to fit my hip-pocket, adds little weight and less bulk. At night, I can roll all clothing in it while I sleep, returning spare items to the bedroll upon arising. Once I'm dressed for the trip, the remaining duffle is rolled in the bedroll and the whole roll occupies a space a yard long, 18 inches in diameter. I can carry it myself without undue discomfort although my hunting invariably is done with a

string of pack animals, hence such labor is unnecessary.

Category Number Two, hunting and photographic supplies, includes:

Voightlander 9x12 cm. film-pack camera, in leather case
Ten packs film for same
Assorted lenses and film-pack holders
8-mm motion-picture camera
Twelve rolls (600 feet) Kodachrome film for same
Assorted lenses and filters
Exposure meter
Cane tripod
Heavy-duty sheath knife, compass in handle
.30-'06 sporter rifle, scope-sighted, in leather saddle scabbard
Twenty rounds 220-grain ammunition
Waterproof match case and salt vial
Kollmorgen monocular
Shooting glasses

This list, too, reflects careful selection. Exchanging the comparatively bulky Voightlander and accessories for a light 35-mm. camera would reduce it further but I like the camera, am accustomed to it, thus retain it even though it adds weight. Its specially-built case holds extra film, exposure meter and accessories. Leftover film for both still and movie cameras is packed in a sturdy but light cardboard box.

The movie camera case also holds extra film and accessories. The tripod, telescoping to less than a foot and a half, also fits in the cardboard box. The cameras I carry over one shoulder where, though fairly heavy, they do not discommode. The knife is worn at my hip, the gun is cased and attached to my saddle. While I carry enough cartridges to meet virtually any emergency, I don't take too many—just enough to resight my gun if the scope is knocked out of line. I carry them in my jacket pocket.

The monocular hangs on a rawhide cord from my neck (the cord is detachable and can be made to do duty in gun cleaning or for minor repairs to saddle, boots or clothing). I wear the shooting glasses or carry them in a shirt pocket.

The Number Three category, general equipment, is a catch-all. It includes:

Complete first-aid kit
Toilet kit
Lariat rope
Saddle bags
Waterproof flashlight with two extra batteries; one extra bulb
Carton of cigarettes
Cigarette lighter
Two bath towels
Wallet
Small oilstone

Though it may at first sight appear bulky, this group actually is quite light. None of the kits is large, none extensive, except the first-aid kit. I'm a nut on this, for my first-aid box is of metal, a foot long, two inches deep, six inches wide. I defy any man to put more medical equipment into that space than I put into it. It contains small scissors, a chapstick (chapped lips are inevitable in high altitudes), tweezers, two rolls gauze, two rolls adhesive tape, small bottle tincture methylate, small tube ophthalmic ointment sulfathiazole, packet sulfa pills, small bottle Bromo-Seltzer, oral cold vaccine tablets, nose drops, small bottle sulfa gargle, benzedrine inhaler, paregoric, oil of cloves, picric acid bandages, small vial ammonia, snakebite assortment, instruction booklet.

Each of those items is there for a purpose; any small emergencies and some large ones can be met with such a kit. Few guides of my acquaintance carry medical supplies, yet if you've experienced the misery of toothaches or bad colds, the discomfort of eye-strains or other ailments, you'll know how valuable a complete first-aid pack can be. Incidentally, my various vials and bottles are wrapped in cotton, which has its own uses.

The toiletries are unpretentious—toothbrush and toothpaste, small bar of soap, comb. No shaving brush or soap, no razor or blades. My backcountry jaunts are my sole opportunity to grow a beard, a process I thoroughly enjoy. If beavers ever become stylish again I'll be a dog of fashion, for nothing in my daily routine is more aggravating than shaving.

The tool kits contains small wire-cutting pliers, a set of nested screwdrivers (all fitting a common hollow handle holding graduated blades), two pieces of foot-square white cloth (for gun patches and other uses), a small combination steel tape and scales, 4-ounce bottle of gun oil, 4-ounce can cigarette lighter fluid, and a tiny pack of extra lighter flints.

These kits are packed in my saddlebags. The lariat rope (never hit the trail without one, for it has a million uses) hangs from the saddle. The flashlight, batteries and smokes also go into the saddle bags. The extra flashlight bulb, wrapped in cotton, is stowed in the first-aid kit. Bathtowels go in the bedroll, while I carry lighter, wallet and the thumb-sized oilstone in my pockets.

That's the crop—except for the luxury items of which my pack boasts four. First of these is so useless it is certain to provoke a laugh. It's a little keychain from which dangle, first a buckeye or horse-chestnut burnished to ebon blackness, and second, the eyetooth of my first bull. There's a story (for another telling) behind the buckeye and the tooth. Suffice now to say they constitute my 'mojo', my big medicine, my good luck. I am not superstitious. I deny it emphatically. But where I go, my 'mojo' goes.

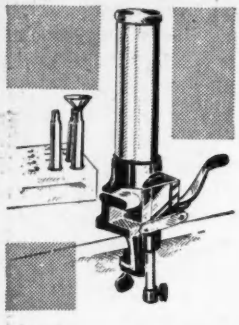
Second luxury is a pair of sheeplined, soft-leather moccasins. That extravagance is for nights around the campfire after a hard day's going. They make me feel like a plutocrat.

Third is a plastic air cushion which deflates and rolls up to the size of a pair of wool socks. I'm one of these chaps who sleeps best with a pillow. This one is inflated and slipped between air mattress and down-bag and is the last item I need to sleep like a baby.

The final item is insignificant in size but Homeric in portent. It's a small cellophane case carried in my shirt pocket and containing two pictures back to back. Sentimental as it may seem, one is The-Lady-Who-Cooks-at-My-House (and who'll prepare anything I'm man enough to bring home), while the other is of my three-year-old daughter who already talks of the day when she'll go pack tripping 'up the trail' with me, as she puts it.

With that, I'm ready to tackle anything from bears to blizzards—and gamble I'll not only come out on top but come out happy and comfortable. ◆ ◆ ◆

"Sure, podner, I'll be seeing you at the NRA Convention, October 17-21." (See page 54)



LOADS FOR THE 8 MM.

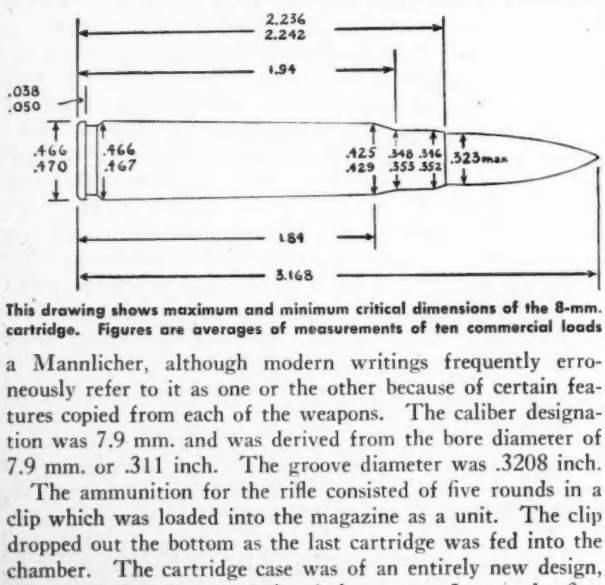
This article on 8-mm. handloads is the fifth of an important RIFLEMAN *series covering the more popular American rifle and pistol cartridges. The series so far has included "Loads for the '06" (*RIFLEMAN, *April, page 28), "Handgun Handloads" (May, page 32), ".257 Roberts Loads" (June, page 32), and "Loads for the .270" (July, page 38).*

Preparation of the material for each article was handled jointly by the NRA's Al Barr and the H. P. White Company of Cleveland, Ohio (see RIFLEMAN, *November 1948, page 21). Five rounds of each of the thirteen loads listed in Table I were checked for average velocity figures and the loads were tested for pressure in a barrel of .311-inch bore diameter, .323-inch groove diameter, 23¾ inches long, in a Modern-Bond Universal receiver using Winchester copper crushers with variation in length controlled to .001 inch and Winchester tarage tables. Velocities were measured on a Potter electronic counter chronograph. Room temperature was maintained at 80 degrees.*

☆ ☆ ☆

THE STORY OF THE 8-mm. cartridge, officially known in Germany as 7.92 x 57 mm., has been told many times, but since it contains many confusing situations it will bear repeating.

In 1888 the German government adopted a bolt-action, small-bore military rifle designed by the Rifle Examining Board convened at Spandau Arsenal. The weapon was officially known as the *Gewehr 88* and was to supersede the 11.15-mm. Mauser rifle of 1871-84. It was not a Mauser nor



This drawing shows maximum and minimum critical dimensions of the 8-mm. cartridge. Figures are averages of measurements of ten commercial loads

a Mannlicher, although modern writings frequently erroneously refer to it as one or the other because of certain features copied from each of the weapons. The caliber designation was 7.9 mm. and was derived from the bore diameter of 7.9 mm. or .311 inch. The groove diameter was .3208 inch.

The ammunition for the rifle consisted of five rounds in a clip which was loaded into the magazine as a unit. The clip dropped out the bottom as the last cartridge was fed into the chamber. The cartridge case was of an entirely new design, 57 mm. in length and of the rimless type. It was the first rimless case adopted by any military power. The bullet was metal cased, round nosed, weighed 226.8 grains, and had a maximum diameter of .319 inch.

When the Mauser rifle of 1898 replaced the M1888 it was made with the same barrel dimensions and was chambered for the same cartridge. A new clip was designed, since with the Mauser-type magazine the cartridges were loaded by stripping them off the clip into the magazine.

In 1905, after some years of study, the German service adopted a new cartridge affording considerable improvement in ballistic qualities. The new round consisted of a case identical to the case for the M1888 rifle but with a pointed, metal-cased bullet weighing 154 grains and having a maximum diameter of .323 inch. This new bullet was called *Spitzgeschoss,* or pointed bullet. All rifles then in the hands of troops were called in and rebarreled. The new rifling had the same bore diameter of .311 inch but the groove diameter was increased to .323 inch. All military rifles made for the German service since 1905 have had these barrel dimensions.

In German military parlance both the 1888 pattern and the 1905 pattern barrels are designated 7.9 mm. regardless of the difference in groove diameter. The two are distinguished from one another by the term "S Bore" applied to the 1905 modification and indicating the .323-inch groove diameter for the spitzer or pointed bullet.

In the German sporting field the cartridges for arms having the 1888 specifications have always been designated as 8 x 57 mm, or 8 x 57J, "J" meaning *Infanterie* (I and J being more or less interchangeable), and if of D.W.M. manufacture bear their pattern number 560. Cartridges for the 1905 or .323-inch groove rifling are called by any of the following names: 8 x 57JS ("S" for spitzer bore), 8 x 57 S Bore, 8 x 57 J Magnum Bore, and if of D.W.M. manufacture bear their pattern number 561.

The 1888 cartridges may be safely used in rifles having the .323-inch groove diameter although there is considerable sacrifice in accuracy due to the small bullet diameter. Cartridges having the .323-inch bullet diameter should never be used in arms of the 1888 pattern due not only to the excessive bullet diameter but also to the increased pressures inherent in the more modern cartridge.

None of the standard American makes of rifles have ever been regularly manufactured for either the 1888 or 1905 style of cartridge. Many actions and barrels of both types have been imported and fitted out by the custom gun trade. These have been offered under a myriad of names. Similarly, many complete rifles in both styles have been imported and sold in this country for many years. Some are very inferior weapons made up from surplus military parts while others represent the highest quality of European workmanship. The only suggestion that can be offered is to know the dimensions of the barrel you possess and the strength of the action in relation to the high pressures you are expecting it to withstand.

About 1904 the American ammunition trade offered to the

public a cartridge which they called the 8-mm. Mauser & Mannlicher, with the recommendations on the box that it was for use in Mauser, Sauer-Mauser, Schilling-Mauser and Haenel-Mannlicher Military & Sporting Rifles. These cartridges had a small bullet diameter of about .317 inch and were intended for rifles having the 1888 specifications. The word "Mannlicher" in these recommendations has led many to believe that these rounds could also be used in the Mannlicher-Schoenauer rifle. This should always be avoided since, although the latter rifle chamber will accommodate these cartridges without any difficulty, the regular Mannlicher-Schoenauer case is slightly shorter and has the shoulder in a different position. It is true that the 8-mm. Mauser & Mannlicher rounds can be used in weapons of the 1905 specifications but there will be a sacrifice of efficiency.

In 1922 Remington introduced a new cartridge which they called the "8-mm. (7.9-mm.) Special." At that time they made the following statement:

"Investigations have shown us that there are many 8-mm. rifles in use whose bore diameters differ. Consequently the regular 8-mm. Mauser & Mannlicher cartridges will not give standard ballistics when used in them. The 8-mm. Special Cartridge has therefore been designed by us and will give splendid results when used in such rifles."

This new cartridge had a 170-grain bullet, about .321 inch in diameter, in place of the 236-grain and 227-grain .317-inch diameter bullets of the earlier round. The recommendations for the new round merely claimed it for use in Mauser & Mannlicher rifles, and we believe that this was their way of presenting a compromise cartridge which would be adequate for both series of barrel specifications. This thought is strengthened by the fact that all 8-mm. Mauser cartridges manufactured in this country have been loaded to minimum pressures to compensate for the wide discrepancies of bore measurement and dubious strength of many of the arms in use. We believe this to be a very wise precaution under the circumstances.

In recent years the old 8-mm. Mauser & Mannlicher cartridge has been discontinued and the name of the 8-mm. (7.9-mm.) Special has been simplified to 8-mm. Mauser. This round is now available only in the 170-grain soft-point bullet loaded to an advertised muzzle velocity of 2530 feet per second. It is still recommended for either the 1888 or 1905 barrels and, like its predecessors, is loaded to minimum pressures.

The first four 8-mm. loads in the table are combinations which have been found quite accurate. One reason is because of the relatively low pressure developed, but heavier charges can be used when developed experimentally.

Many reloaders like to use IMR 4350 powder, because it is the newest of the DuPont series. It is an excellent powder for heavy bullets in large-capacity cases but hardly suitable in the 8 mm., even with the 170 grain. Seating that bullet to the normal .34-inch depth in load 9 compressed the 54-grain charge. Level full, the case will hold only about 57 grains of powder, leaving no space for the bullet.

However, IMR No. 4350 powder can be used in the 8-mm. cartridge with the extremely heavy 250-grain Barnes bullet, which has been recommended as being nearly ideal for very heavy game. We have loaded 48 and 50 grains of this powder with the 250-grain Barnes bullets, and both loads were O.K. in our 8-mm. Mauser military rifle of .323-inch groove diameter. These very heavy bullets with long bearing surface should not be used in the smaller bores of the older 8-mm. rifles.

Loads 5 and 6 appear to be identical. However, load 6 contained IMR 4895, lot 27277, which we obtained direct from the DCM. Powder of the same lot number used in load 5 was sent in by a member who claimed he was getting into excessive pressure, even when using No. 3031 as a guide. And there is some difference in pressure developed using the same lot number of powder. The difference could possibly have been caused by changes in the moisture content of the powder. Our own powder was placed in tightly sealed containers immediately after being removed from the air-tight metal container in which the powder was shipped.

For target shooting loads 10 and 11 are very accurate in most rifles. Trying load 12 because it had been recommended as being accurate by one custom loader, we found the load entirely too heavy for any kind of accuracy in two of our 8-mm. rifles. Reducing the charge to 17 to 18 grains of 4198 gave us the best combination we had with the very excellent 173-grain Bond-Loverin gas check No. 323876 as supplied by Ralph MacWilliams, 519 High Street, Clinton, Massachusetts.

Another good target load is recommended by Paul G. Mansfield, New Boston, New Hampshire. We have tried his handload of a 181-grain Ideal gas check No. 321297 with another combination powder charge which used No. 4198 and Pistol Powder No. 5 as a booster charge, the entire charge weighing 20.8 grains. We have found that 3 grains of No. 5 powder mixed thoroughly with 18 grains of No. 4198 makes a good load. Another good combination is about 3 to 4 grains of No. 5 powder and 19 grains of No. 4895, lot No. 27277 (if

Table I: Velocity and Pressures for 8-mm. Loads

Load	Bullet Weight (grains)	Bullet Type	Bullet diameter (inch)	Seating depth (inch)	Charge (grains)	Powder type	Lot No.	Primer	Case make	Velocity 20 ft. (ft.-seconds)	Pressure (lb. sq. in.)	Remarks
1	125	Speer SP	.3225	.25	50.0	4895	27277	WRA 120	LC 43	2925	44,000	Varmint loads
2	125	Speer SP	.3225	.25	49.0	3031	88	WRA 120	DEN 42	2943	40,800	Varmint loads
3	125	Speer SP	.3225	.25	49.0	3031	88	WRA 120	Peters	2878	37,360	Varmint loads
4	125	Speer SP	.3225	.25	53.0	4320	20	Peters 12	Peters	2884	39,800	Varmint loads
5	170	Speer SP	.323	.34	47.0	4895	27277	WRA 120	SL 43	2667	48,740	Near maximum
6	170	Speer SP	.323	.34	47.0	4895	27277	WRA 120	SL 43	2619	44,300	Accurate load
7	170	Speer SP	.323	.34	47.0	3031	88	WRA 120	SL 43	2726	45,800	Accurate load
8	170	Speer SP	.323	.34	52.0	4320	20	Peters 12	Peters	2689	46,400	Good load
9	170	Speer SP	.323	.34	54.0	4350	10	Peters 12	Peters	2510	37,480	Compressed load
10	181	Gas Check	.323	.49	18.0	4759	2C	WRA 115	DEN 42	1649		Target load
11	181	Gas Check	.323	.49	25.0	3031	88	WRA 115	DEN 42	1579		Target load
12	181	Gas Check	.323	.49	23.0	4198	8C	WRA 115	FA 34	2304		Inaccurate
13	170	Commercial load								2496	34,120	

No. 5 cannot be obtained, No. 6 or No. 5066 may be used).

Made by Harold Burnett, 6035 E. Grand River, Howell, Michigan, another excellent custom load we tried was 43 grains of HiVel No. 2 with 170-grain soft-point bullets. It is a mild but very accurate load.

For a squirrel load one 8-mm. reloader recommends the Ideal No. 321427 bullet, made of a zinc alloy such as Kirksite, weighing 91 grains, with 6 grains of Pistol Powder No. 6. Similar loads have been tried but we could not get much better than 2-inch accuracy at 50 yards.

A good load with the 181-grain and 173-grain gas-check bullets is 21 to 22 grains of Hercules Lightning, which duplicates velocity obtained with 18 grains of 4198 or 19 grains of 4759. Equally good in most rifles is 16 to 17 grains of No. 2400 powder. For higher velocity, a charge of 22 grains of No. 2400 gives 1995 foot-seconds velocity with the 181-grain bullet.

Lead bullets for the larger bore 8-mm. rifles should be sized .323- to .325-inch diameter, but for the smaller barrels regular .32-40 or .32 Winchester Special bullets sized to .321 inch may be more accurate. For heavier loads in the small barrels, the jacketed .32-40 and .32 Special bullets are the best to use as they measure around .321-inch diameter. With the smaller bullets, most of the loads listed in Table I may be used.

One naturally might be inclined to wonder why a caliber so widely used throughout the world as the 8 mm. has never been available on the American market in domestic commercial weapons. It is undoubtedly due to the great similarity of the 8-mm. round to our own .30-'06 service caliber. The two cases are approximately the same in body diameter and taper, but the .30-'06 is longer, affording about nine percent greater powder capacity. The capacity of the 8-mm. case is 3.99 c.c. and that of the .30-'06 is 4.35 c.c. From the standpoint of comparative ballistics there would not be sufficient difference to merit the manufacture of the 8-mm. cartridge, since the .30-'06 is already on the market in a wide variety of loads.

In view of the similartiy of the cases, and since regular 8-mm. cases have been scarce for reloading, the .30-'06 is generally sized down to shape and then trimmed to length. The maximum length for the 8-mm. cartridge case is 2.254 inches, so all resized .30-'06 cases should be trimmed to that length. However, such 8-mm. loads with .30-'06 headstamp should be plainly marked in some way to prevent using them in .30-'06 rifles.

In comparing load 2 with load 3 the reader will note everything was identical except the cases. Cases used for load 2 were the .30-'06 reformed and shortened to proper 8-mm. length. The Peters 8-mm. cases used in load 3 have a slightly larger powder capacity than the reformed '06 cases, so velocity and pressure was kept down accordingly. A maximum load recommended for regular 8-mm. cases such as the Peters, may be too heavy for use in reformed '06 cases. All such things must be taken into consideration when one attempts to load a maximum charge for any cartridge.

"Sorry! Gotta be on time for the NRA's Second Annual Convention, October 17-21" (See page 54)

Many reduced loads can be developed for the 8 mm. One good way is to refer to the very generous loading dope available for the .30-'06 cartridge and drop the powder charge 1 to 2 grains for any recommended load in .30-'06 caliber when using bullets of equivalent weight in the 8 mm. This method of selecting loads for the 8 mm. is practical even when using jacketed bullets and near full loads, but then the charge should be cut 3 to 4 grains as a starting point.

A good example would be the maximum recommended load for a 150-grain .30-'06 bullet with .25-inch seating depth using DuPont No. 3031 powder. The maximum charge is 54 grains giving 3060 foot-seconds in a 24-inch barrel. In the 8 mm. using a 154-grain bullet with .25-inch seating depth, the maximum recommended charge of No. 3031 is 51 grains, which gives 2945 foot-seconds velocity in a 31-inch barrel. Another example is No. 4064 and 220-grain .30-'06 bullets with .38-inch seating depth where the maximum charge is 49 grains giving 2380 foot-seconds. With a 227-grain bullet in 8 mm. the maximum load is 50 grains giving 2520 foot-seconds velocity. The seating depth for this load is only .25 inch, which may be one reason why the heavier charge can be used.

Another direct comparison is furnished by the pressure and velocity figures in Table I and the same ballistic data as given in "Loads for the '06," page 29, RIFLEMAN, April 1949. The comparison even extends to the drop figures as listed on page 30 of the April issue, which are about the same for both calibers when equivalent loads are used.

A word of caution regarding 7.92-mm. military cartridges is certainly in order. Great quantities of special purpose rounds of many nations have come into the country during and since the recent war. Many of these were designed for use only in machine guns and yield extremely high pressures. Others contain high explosive or incendiary elements of considerable hazard. It is wise to avoid the use of all military ammunition of any kind unless one is positive of its inherent characteristics and relative safety. ● ● ●

CHANGE OF ADDRESS: *Please report changes of address direct to the National Rifle Association, allowing five weeks before change is to take effect. Be sure to send your old address, preferably address label from the* RIFLEMAN, *together with new address. Copies that have been mailed to an old address will not be forwarded by the Post Office unless extra postage is sent to that office by the subscriber. Avoid such expense, and make sure of getting your* RIFLEMAN *promptly each month by notifying the NRA direct, in advance of change. Address the National Rifle Association, 1600 Rhode Island Avenue, Washington 6, D. C.*

International and National Matches

PLANS ARE NOW in the final stage for the International Rifle and Pistol Matches, to be fired in Buenos Aires November 4-13, and for the annual regional and national championships of the National Rifle Association. Here are all of the facts available at press time.

INTERNATIONAL MATCHES

Due to the impossibility of firing the big-bore free-rifle tryout on the Camp Dodge (Iowa) range or at any nearby range, plans for the International rifle tryouts have been altered. (The Camp Dodge range is closed to .30-caliber rifle firing and there are no other 300-yard ranges in that vicinity.) Only the small-bore tryout is now scheduled for Camp Dodge, to follow the National Small-Bore Championships. The course of fire will be 40 shots prone, 40 kneeling and 40 standing at 50 meters on the 50-meter International target. NRA Registered Tournament targets will be used. The tryout date is September 5th.

From the small-bore tryout the *two* high-scoring competitors (*not one* as stated in the July RIFLEMAN) will be named to the International Rifle Team. These two competitors will not be required to fire in further tryouts. At least one of these men will be required to fire on the big-bore free-rifle team in Argentina, so both must be prepared with the necessary big-bore free rifle and equipment.

Only a few small-bore riflemen are interested in, or equipped with, big-bore free rifles and the other equipment for that specialized type of shooting. The 1949 International Shooting Union Matches stress these big-bore events heavily. This being the case, the committee has decided to select the remaining four rifle team members through big-bore tryouts. A shooter may fire in these tryouts even though he has already fired in the small-bore tryout at Camp Dodge. Riflemen will thus have two opportunities to try for team places.

As no centrally located big-bore free-rifle range is available it has become necessary to set up a West Coast preliminary and an East Coast final where such ranges are available. The West Coast preliminary is scheduled at Camp Mathews, California, on Saturday and Sunday, August 27 and 28. August 27 will be devoted to practice and August 28 to record firing. The course will be 40 shots prone, 40 kneeling, and 40 standing at 300 yards on the 300-meter International target. Any eligible shooter (see the statement below) may fire.

For details on this preliminary, write either L. A. Pope, 532 Oak Ford Drive, Los Angeles, Calif., or the International Team Selection Committee, NRA Headquarters, 1600 Rhode Island Ave., NW, Washington 6, D. C.

From scores at the Camp Mathews preliminary the committee will select competitors to fire in the finals, provided all who are so selected have fired a score of at least 1020 out of 1200 in the tryout. *The top three of those selected at this tryout will have their transportation expenses paid by the National Rifle Association from their home to the East Coast finals and return.* This is being done to assure the best possible team selection and at the same time not put a heavy financial burden on West Coast shooters.

The final big-bore tryout will be held at Quantico, Virginia, on the Friday, Saturday and Sunday after Labor Day—September 9, 10 and 11. Friday will be for practice, the next two days for record firing. The regular 300-meter course, with 40 shots in each position, will be fired on the International target once each record day. The four high-scoring competitors in the Quantico finals will be named as the balance of the six-man U. S. International Rifle Team for competition in Buenos Aires.

The International Pistol Team tryouts remain scheduled for Fort Sheridan, Illinois, during and following the NRA National Pistol Championships over Labor Day weekend.

During the Championship—whenever time is available—the 25-meter rapid-fire silhouette tryout will be held. Practice firing is tentatively planned for September 1 and 2, and record firing on September 3 and 4. Record firing days may be extended if necessary to accommodate all who wish to try out for the team.

The slow-fire pistol stage will be fired at 50 meters. It will be shot either September 5 or 6, depending on the National Trophy Individual and Team events.

The committee is extremely anxious to provide both time and space for everyone who wishes to fire, and so far no limitations have been placed on the number of tryout competitors. If entries must be limited, full details will be posted at Fort Sheridan.

The 1949 U. S. International Pistol Team to compete at Buenos Aires in November will consist of the high-scoring competitor in the rapid-fire tryout stage, the high-scoring competitor in the slow-fire tryout stage and the four high-scoring competitors in the combined stages. In order to give equal weight to both types of shooting the exact number of shots in each stage and the scoring procedure will be announced at Fort Sheridan prior to the tryout.

Entry in the small-bore and pistol tryouts will be required upon arrival at the respective location. A fee of $1.00 will be charged at Camp Dodge, and $2.00 at Fort Sheridan.

STATEMENT REQUIRED FROM TRYOUT PARTICIPANTS

Entry in the Camp Mathews preliminary tryout and in the three finals at Dodge, Sheridan and Quantico will be restricted to those who have executed the following statement. This is required so that those who are seriously interested in trying for a place on these important teams will not be disturbed by others who are 'just shooting'.

The International Shooting Union governs the international sports of rifle and pistol shooting. Its rules provide that the following are *not* amateurs:

(1) "Anyone who gives an exhibition in marksmanship and is paid for it."

(2) "Anyone who professionally tests guns."

(3) "Anyone who professionally instructs in marksmanship. This does not include members of the armed services who instruct recruits." (Nor is it interpreted to apply to law-enforcement officers.)

Every person desiring to enter the preliminary or final tryouts for the International Match Teams must receive an authorization from the committee (or its representative) before he will be permitted to shoot. These will be issued at the tryout concerned. In making application for this authorization he will be required to execute a statement as follows:

"1. I am a citizen of the United States and have been for at least two years.

"2. If I win a place on the team, I will be able to make the trip to Argentina.

"3. I make this application solely of my own volition and hereby release the National Rifle Association and all team officials from any and all claims for possible damages, losses, and injuries.

"4. I, the undersigned, declare on my honor, that I am an amateur according to the rules of the International Shooting Union; that I have participated in sport solely for pleasure and for the physical, mental or social benefits I derive therefrom; that sport to me is nothing more than a recreation without material gain of any kind, direct or indirect, and that I am eligible in all respects for participation in the International Matches.

Date..... *Signed*.....
Witness....."

Word has just been received from Olin Industries (Western-Winchester) and Remington Arms Company that they have developed and have available for sale a special .30-'06 300-meter International Match load of exceptional accuracy. Inquiries regarding this ammunition should be addressed directly to the manufacturers.

In the International story published last month it was stated that in the International kneeling position the sandbag between instep and ground *must* be used. That regulation has been changed to state that the sandbag *may* be used.

In the International kneeling position the arm which supports the rifle must rest on the knee and the foot of the supporting leg must be flat on the ground.

International shooting rules do not permit the type of gauntlet shooting glove commonly used in this country. Gloves *without* gauntlet wrists may be used.

A small-bore or pistol shooter who is not firing in the respective National Championship but who wishes to compete in the tryouts should make application directly to the committee named below. Such application should state competitor's name, address, average score over course in tryout, competitive experience and the type of equipment he will use.

General Reckord, as Vice President of the International Shooting Union for North America, has named the following International Team Selection Committee for the United States: General M. A. Reckord, chairman; General J. S. Hatcher, vice-chairman; Mr. Frank Parsons, secretary; Mr. Karl J. Frederick, General Sidney R. Hinds, and Colonel Roy D. Jones. Address mail to committee in care of NRA Headquarters.

NATIONAL SMALL-BORE CHAMPIONSHIPS

These matches will be held at Camp Dodge, Iowa, Saturday 3-4. The firing schedule was published in the July RIFLEMAN.

At the time this is written no entries have been received. After August 1 (closing date for entries) all entries which can be accepted—to the full 250-shooter capacity of the range—will be acknowledged by letter. Shooters whose entries cannot be accepted will be notified.

The award schedule will be:

1949 National Championship (Grand Aggregate):

Winner	Critchfield Trophy and Special Silver Award.
Second through Tenth	Special Silver Awards.
High Woman	Special Silver Award.

Metallic and Any-Sight Sub-Aggregate:

First through Fifth	Special Silver Awards.
Sixth through Tenth	Sterling Silver Medals.

Each Fired Stage:

First	Gold Medal.
Second through Tenth	Sterling Silver Medals.

Shooters going to Camp Dodge for the Nationals will find quarters in Camp available starting the night of September 1. Meals at Camp Dodge will start with breakfast on September 2. Earlier arrivals must make arrangements for quarters and meals outside camp.

The U. S. International Dewar Team will fire Monday, September 5. Team selection will be based on rankings in the metallic-sight aggregate.

NATIONAL PISTOL CHAMPIONSHIP

The '49 handgun championship will be decided at Fort Sheridan, Illinois, September 2-4. The match schedule was published in the July RIFLEMAN, page 42. All accepted entries (400 maximum) will be acknowledged by letter, and any shooter whose entry cannot be accepted will be notified.

The award schedule will be similar to that for small bore and will include the following:

1949 National Championship (Grand Aggregate):

Winner	Harrison Trophy and Special Silver Award.
Second through Tenth	Special Silver Awards.
High Woman	Special Silver Award.

.22-Caliber, Center-Fire and .45-Caliber Sub-Aggregates:

First through Fifth	Special Silver
Sixth through Tenth	Sterling Silver Medals.

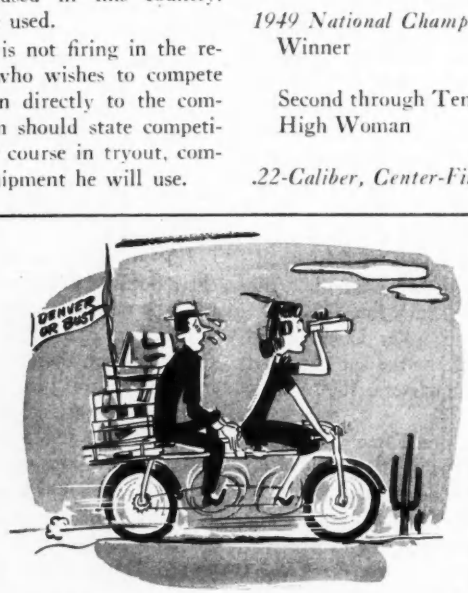
Each Fired Stage:

First	Gold Medal.
Second through Tenth	Sterling Silver Medals.

Each Team Match:

Winner	Trophy and Sterling Silver Metal

Quarters will be available at Fort Sheridan beginning the night of August 31. The first meal will be served Sept. 1. ◆ ◆ ◆



"But darling, we don't have to travel this way! The NRA is running a special Convention train."

Rifle Shooting in Denmark

The hardships imposed on shooters by German occupation forces and registration lists have not yet been overcome

By PHILIP B. SHARPE

THE AMERICAN target shooter still may be having a few difficulties getting what he wants, but some of the boys in other lands, who have just as ardent a love for target shooting, really know what troubles can be. Take Denmark, for instance.

On a military mission to Denmark in late summer of 1945, I was being driven from Copenhagen to the Mosede Proving Ground. It was a lovely day and my fellow passengers, all civilian executives of a large Danish plant, were telling me of prewar Denmark. Riding down the coast, we were attracted by a familiar sound overhead. Looking up, we saw a beautiful flight of wild ducks heading South. A plant director sighed audibly.

"They're flying early," he said, sadly. "I wish I had my guns back."

Another of my good friends, Erik Saetter-Lassen, a captain of the Royal Danish Air Force, sub-director of the Madsen (automatic weapons) plant in Copenhagen, and former Danish small-bore rifle champion, told me the real story of Danish shooting—or lack of it.

Besides the hunting of birds and small game—there is little big game in Denmark—the sport of rifle shooting has always figured prominently among shooters in all walks of life. There are two organized groups of riflemen, the Union of Danish Riflemen and the Association of Riflemen and Gymnasts. Their competition was both national and international. The short distance between Denmark and Norway, Sweden and Finland made possible frequent team visits to nearby countries.

On the ninth of April, 1940, Germany invaded the country of King Christian, placing nearly everything under military law. Within a few days an order was issued prohibiting all kinds of sport shooting.

Denmark, like many other foreign lands, had long required the registration of all kinds of firearms except military weapons. The invaders promptly confiscated records and set up headquarters in various centers, chief of which was the Shell Oil Building in Copenhagen taken over by the Gestapo. They publicly proclaimed that the Danes must immediately turn in all weapons, with severe penalties for failure to do so. Holding Danish police registration records, they were in a position to enforce their demands.

The Danes loved their late King Christian. He had a way of ignoring the Germans and forcing many of his demands for a small amount of freedom for his peoples. As a result of his pressure, members of the two shooting organizations were permitted to retain their small-bore target rifles. They were also permitted limited practice. It is believed that Denmark was the only invaded country to receive such permission.

Naturally Danish riflemen and target shooting activities were under extremely rigid control, but the obstinate Danes kept shooting until August 1943. At that time, the Danish government, taking exception to the heavy and increasing demands made on them and their resources by the invaders, suddenly refused any kind of cooperation with the Germans. As a result, the officers of the Danish Army and Navy were placed under arrest and an order went out prohibiting all kinds of shooting.

The seizure of registered rifles followed immediately, and in September 1944 the Gestapo captured hidden police records, not previously turned in, of other sporting weapons. The weapons were picked up and the lot was shipped to Germany. Naturally all available ammunition went with the guns.

When Germany surrendered and the last invaders left their soil, Danish sportsmen and riflemen found themselves stripped of their weapons. But the shooting fan never gives in.

There is only one good gun plant in Denmark—the Schultz & Larsen factory in Otterup, on the middle island of Fyn. The plant is old—Larsen rifles antedate the American Civil War—but their precision match rifles are known throughout the world. Although the Germans had closed the plant during the war—it was a sporting rifle firm, retooling for military production was impossible, and the Danes refused to produce for the Germans—limited production began again in 1946.

Holding Danish police firearms registration records, German occupation troops were able to enforce the demand that all weapons be turned in

The demand for the Schultz & Larsen product is high in Denmark, but the American shooter is not confronted with the headaches of the Danes. In order to keep the plant running, the plant imports steel. In order to keep steel coming, they are compelled to export their guns. Only a tiny percentage of their product is permitted to be sold to Danish riflemen.

By mid-summer 1947, Schultz & Larsen were producing two models of rifles, the low-priced number in .22 caliber selling at Kroner 125 (about *(Continued on page 47)*

a new one to look for . . .

THE HARPER'S FERRY 1819

BY C. MEADE PATTERSON

MILITARY ARMS MANUFACTURED by the United States Armory at Harper's Ferry have always possessed an appeal for the collector of ancient firearms. The name brings to mind a drowsy hillside town at the confluence of the Shenandoah and Potomac rivers. Harper's Ferry was favorably located for the establishment of a national armory. In addition to an ample supply of water power, it was situated on two principal rivers and along a canal linking Cumberland, Maryland, and the District of Columbia. It was at that time a gateway to both the west and the south. It could supply the military needs of a westward-growing nation as well as those of the southern states. These natural advantages, foreseen by President Washington when he made plans for the armory in 1796, could not have been carefully weighed against subsequent events. Washington could not have anticipated John Brown's raid, the secession and division of Virginia, or the burning of the arsenal to prevent capture on the night of April 18, 1861.

Although the last days of the armory were violent, it died a lingering death. Machinery and gun parts salvaged from the fire were taken to Richmond, Wytheville and Fayetteville to serve the Confederacy. It was not until 1866, when the last parts of machinery were 'recaptured' from a coal mine in Georgia, that the Harper's Ferry Armory was laid to rest.

The Armory at Harper's Ferry produced approximately a half million shoulder arms during the flintlock period, from 1801 to 1844. During this same period 4,102 flintlock pistols were made. Presumably all but six of these Harper's Ferry pistols were the United States Model 1806 and were made between the years 1806 and 1808[1].

Ordnance records of Harper's Ferry (cited by Satterlee[2]) mention two pattern muskets, two pattern rifles and six pattern pistols, in addition to 7,020 muskets and 3,324 rifles made during 1819. In describing the United States Model 1819 pistol, Major Arcadi Gluckman[3] states, "This model is based on patterns furnished Simeon North by the Ordnance Bureau. . . . Probabilities are that the pattern pistols for it were made at the Harper's Ferry Armory, which according to ordnance reports, made six pattern pistols in 1819." Writing two years later, Major J. E. Hicks[4] states definitely that the pattern for this pistol was manufactured at the Harper's Ferry Armory. He publishes two letters written by Simeon North to the Quartermaster General concerning the pattern pistols. On June 11, 1819, North inquired about one pair of pattern pistols and one pattern rifle to be delivered to him according to instructions received from Colonel Decius Wadsworth of the Ordnance Department. On the following day, North acknowledged the arrival at Middletown, Connecticut of a pair of pattern pistols and one pattern rifle with two spring vises.

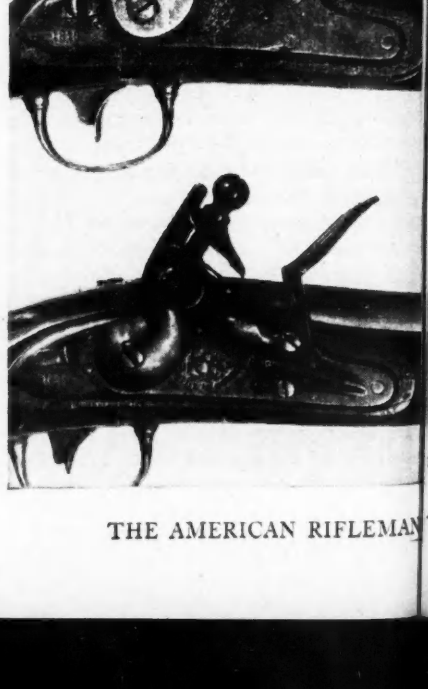
1) Bomford, Lt. Col. G., Chief of Ordnance: *American State Papers Class V, Military Affairs*: Document No. 236, Table D, November 30, 1822.

2) Satterlee, L. D.: *Catalog of Firearms*: Second Edition, pp. 301-302.

3) Gluckman, Arcadi: *United States Martial Pistols and Revolvers*: pp. 40, 56-57 and 76-77.

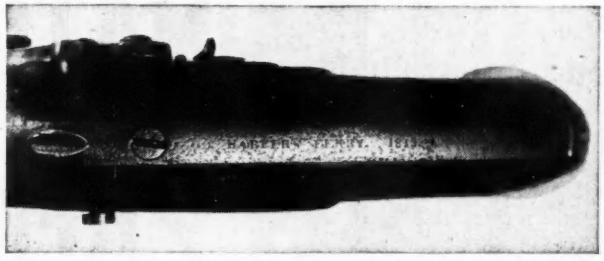
4) Hicks, Major James E.: *U. S. Ordnance. Small Arms 1776-1946*: Volume I, pp. 59-60.

The upper pistol in each photo is the 1819 Harper's Ferry pattern pistol, and below is the 1822 pistol copied from it by Simeon North. Armory records show that six of these patterns were made



On July 21st, after examining the pattern pistols and considering their manufacture for a period of nine days, North contracted to deliver 10,000 pairs during the next five years at $16.00 a pair. Major Gluckman states that North's contract was completed fourteen months ahead of schedule, the 1819 Model pistols being delivered as follows: 2,000 in 1820, 7,000 in 1821, 8,000 in 1822 and 3,000 in 1823.

What is believed to be one of these six Harper's Ferry pattern pistols has recently come to light in Pittsburgh. The writer understands another is in the collection of Mr. William M. Locke of Cincinnati. Unfortunately for the sake of comparison, the Pittsburgh pistol has been altered to percussion by a method described by Gluckman as the 'second alteration' type. A cylindrical lug or drum with nipple was screwed into the right side of the breech after removal of the flintlock parts. This alteration probably occurred during the 1850's and, judging from the engraved percussion hammer used, was probably not a government arsenal alteration. All other parts of this pistol appear to be original.



The iron backstrap of the pattern pistol found in Pittsburgh bears the marking 'Harpers Ferry 1819'. The lockplate is stamped 'US' with eagle and shield

Certain minor modifications of the 1819 Harper's Ferry design were made by North. The stock of the 1822 North pistol is less strongly curved at the butt than is that of the 1819 pattern, which seems to be a tendency to break away from the influence of the 1816 Model. The top of the North butt cap is more nearly horizontal, another departure from earlier Berlin and Middletown pistols. The trigger is shorter and modified in shape. The barrel band spring is shorter, being 1⅞-inches long in the North pistol and 2 1/16-inches long in the Harper's Ferry pattern pistol. The brass front sight is only ⅝-inch from the muzzle in the North model as compared with ⅞-inch in the Harper's Ferry. Other minor variations exist in the stock, trigger guard, ramrod and swivel.

As might be expected, the markings are quite different. The Harper's Ferry lock plate is stamped with the same conventional eagle and shield above 'US' found on Harper's Ferry musket lock plates of the same year. This eagle faces the breech of the gun. The North eagle with shield faces the muzzle and 'US' does not appear beneath but as one letter on each side of the eagle. 'S. North' appears in a curve above the eagle and shield and 'Middletown, Connecticut' (abbreviated) appears in a curved line below. The date 1819 occupies the same position behind the hammer as the date 1822. The Harper's Ferry pistol barrel is stamped 'V' and 'P' (viewed and proved) above an eagle head, which is the same marking that appears on the Harper's Ferry musket barrel of 1819. The North pistol barrel, on the other hand, is stamped 'JP' and 'P' (Jacob Perkins, inspector, and proved) above 'US'. In addition, the iron back strap of the pattern pistol is marked 'Harpers Ferry 1819', and the butt cap below the union with the back strap is stamped 'US'. Other descriptive details correspond to those given for the United States Model 1819 North pistol.

Whether or not this Harper's Ferry pattern pistol was actually one of the two sent to North, we can never know. It was either used as a pattern at Middletown or may have been kept at the Ordnance Bureau in Washington to compare with North pistols as they were delivered. It seems unlikely that it was regularly issued until after the 1819 pistols had been replaced by later models. This Harper's Ferry pattern pistol may have been issued with assorted arms during the Mexican War or it may first have been noticed during the period of general flintlock conversion when all firearms in United States arsenals were inspected and those in serviceable condition altered.

♦ ♦ ♦

Rifle Shooting in Denmark

(Continued from page 45)

$27.50 at current exchange) and their famous competition rifle, also a .22, selling for Kroner 500 (about $100).

I have one of these rifles—a heavy-barrel, falling-block, high sidewall number with a heavy stock. With a 31-inch barrel, Redfield-type micrometer extension rear sight, a hooded front sight with removable inserts, and an adjustable aluminum buttplate, the rifle weighs 13 pounds 4 ounces. I picked it up in Germany, and on a visit to the United States in 1946, Captain Saetter-Lassen looked it over fondly. "It's a good rifle," he murmured, "I had one like it . . ."

The captain tells me that American match .22 ammunition has been the favorite among Danish riflemen for a generation. Yet, lack of foreign exchange prevents the Danes from buying the good brands they need.

Denmark does not make .22 ammunition. In 1939, .22 ammunition imports of that country, all types from the regular .22 short to match .22 long rifle, ran over nine million kroner—about two and one-quarter millions of dollars. This represents an estimated 300 million rounds.

In 1946, with the shooting game slowly reviving, Danish imports of .22 ammunition ran only about $200,000, or about fifteen million rounds—with today's demand far in excess of 1939. Little of the imported ammunition came from the United States because of the shortage of American dollars.

In June 1947, despite the shortage, there was little hiking of prices on ammunition such as was noted in this country during 1946. Ordinary .22's sold in Denmark for about thirteen dollars a thousand. Match grade .22 long rifle, mostly ICI (British), sold at eighteen dollars. With these handicaps, the Danish small-bore shooter is trying his best to keep in training. Where the American shooter would consume 500 rounds in practice, the Danish rifleman must be content with one ten-shot string. He does not waste ammunition in fouling and for sighters.

The Danes are not discouraged. They are fighting hard to get back on their feet. And they sadly recall the 'advantages' of firearms registration, which, I am told, was also 'to prevent crime'.

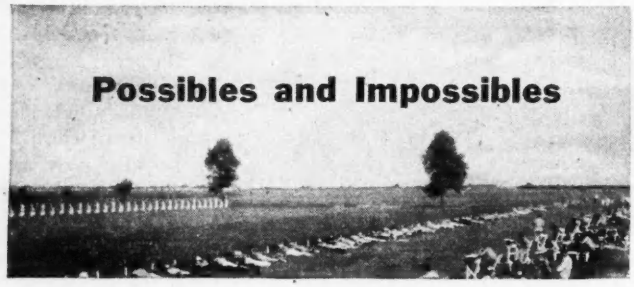
♦ ♦ ♦

A PAPER FOR PEOPLE WHO SHOOT

Rifle Reflo

VOL. 12, NO. 8

BRIDGEPORT, CT., AUG



Possibles and Impossibles

Always interested in news and new terminology in the rifle shooting game, we were pleased to receive a letter recently from one of our British friends telling us about "POTS AND MUGS," as he described it, "English Fashion."

He starts out, "You might think a Pot and a Mug were the same thing, but they aren't; it is the Mugs that shoot for the Pots." Before this goes much further, some of you (as we did) might like a little light shed here and there as to what this is all about.

A Pot, he explains, is what we Americans generally refer to as a cup or trophy. And a Mug is the eternal optimist who is always on the line trying, but seldom, if ever, quite good enough to win the Pots. The following are the high points of his story.

"We are a great crowd, we Mugs; if we did not think so, nobody else would, anyway. We roll up to the Open Meetings with a glorious hope that because we once, when the light was clear and soft and the wind did not exist, and we were shooting far beyond our normal form, made 397 over the Dewar course, we shall this day of all days do it again, or something even better, and thereby wipe the eye of the Good and the Great whose names appear so monotonously at the head of all the prize lists.

"The Meeting here is generally held at one of the established ranges or, in the case of a meeting held outside the London area, often on a range constructed for the purpose at some convenient spot where there are facilities for accommodating visitors, such as one of the well-known seaside resorts.

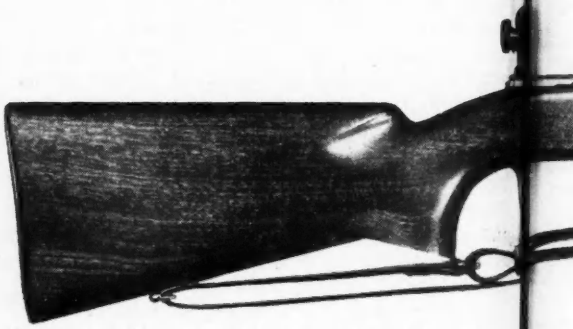
"We shoot at 25, 50 and 100 yards and, because the British climate is notoriously unreliable, the firing point is usually covered by a tarpaulin roof stretched on wooden framework. This is great fun, this roof. The special design used by our Meeting Promoters is particularly suited to the English climate in that when the wind blows it gets underneath the canvas, which is usually sagging a little, and decants one or more gallons of collected water on your defenseless back. This is one of the glorious occasions for the Mugs, because the water descends with absolute impartiality on the Good and Great as well as the Mugs.

"The Mug, when he first arrives at the Meeting, parks his gun, telescope and what-have-you in the competitors' tent and generally takes a walk round to see who is there. He then puts on his shooting jacket after his walk round, and if he can stand next to a well-known International Shot and find himself included in a photograph taken by a roaming camera-man, his cup of joy is indeed full.

"Having gone for the first couple of strolls, he then decides it is about time to start shooting. This is the part of the business where the Mug really earns his name, because he usually wastes a great lot of ammunition in firing Sweep Stake shots in the heat of day, with the mirage at its best, with the laudable idea of shooting himself into form for his single entry competitions. When the exhausted Mugs retire from the fray, and the sun has gone down a little and the breeze softened, the Good and the Great then come out, settle themselves comfortably, knock off a possible or two and help themselves to the Sweep Stake money invested by the Mugs."

But the picture isn't entirely as black as our English friend paints it. He concludes by saying that in spite (or because) of everything, he and the rest of the Mugs improve steadily, thoroughly enjoy the English Open Meetings and wouldn't miss one for the world. And we believe that this is the kind of spirit that will eventually start those Mugs winning Pots.

NATIONAL CL
REMINGTOM



Bridgeport, Conn., August 1949. From what we've see racy elling around the Regionals circuit this year, there ar d sto to be plenty of shooters toeing the mark at the Nation racle Remington Model 37's. One can't help but notice how drag this precision target rifle has become with high scoring s ertai from coast to coast. It's a sure indication that an expert's front to hold, aim and squeeze is being backed up by this Re veral match rifle's ability to put the bullet just where he want

The world famous Model 37 fulfills all requirements fo the in

AROUND OUR CLUB . . . The Experimental

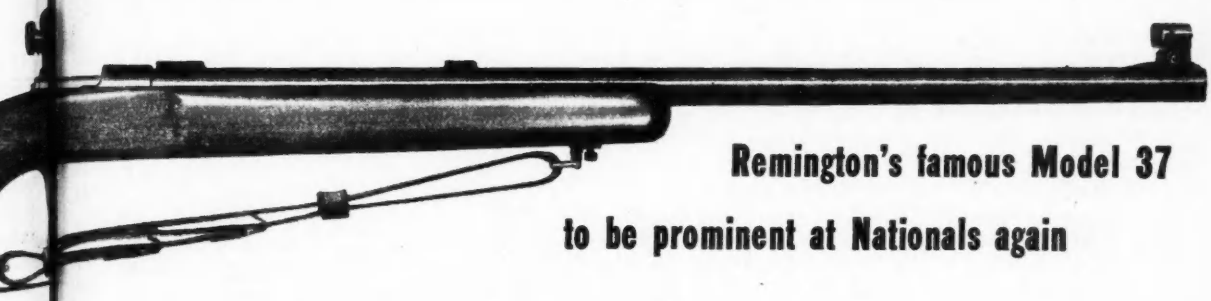
"Rangemaster," "Palma," "Targetmaster," and "Kleanbore" are Reg. Off. by Remington Arms Company, Inc.

Remington News

EPORT, AUGUST, 1949

WEATHER:
ALMOST AS HOT AS THE NATIONALS COMPETITION!

QLIFIERS WARM UP
OMODEL 37'S FOR BIG TEST



Remington's famous Model 37

to be prominent at Nationals again

've see racy in all positions. It has a specially designed full-fash-
ere are d stock, with high, thick comb and close pistol grip. Its
Nationa racle Trigger" has a smooth, crisp lightening-fast let-off.
how drag or creep. It's a joy to squeeze! There's a wide, long
oring s ertail fore-end for steady holding. And there's an adjust-
xpert's front sling swivel.
his Ren
e want veral different iron sight combinations are available, includ-
ents for he immensely popular team of Remington micrometer rear sight with ¼ minute clicks and Redfield front sight (with seven interchangeable inserts). Adjustable extension mounting block is supplied with rear sight. Another important advantage is the single sighting plane. You use iron sights or telescope with your cheek pressed against the same spot on the comb of the stock! It's a great aid to accuracy through uniform holding. Ask your dealer to show you a Remington Model 37, or try your friend's "Rangemaster." You'll see immediately that it is the finest match rifle you ever shot!

Remington Match Ammo . . . A Grand Confidence Booster

Why do so many match-wise rifle and pistol shooters shoot Remington "Palma Kleanbore" and "Police Targetmaster" ammunition? Because, from experience on the local ranges and in hot competition, they know that Remington ammunition gives the consistent, dependable grouping they need for maximum accuracy. Many of them know of the extensive tests constantly going on in Remington ballistics laboratories, scrutinizing every ingredient of fine Remington cartridges, making positive that your Remington ammo will always go right where you aim.

Confidence follows naturally when you shoot Remington "Palma Kleanbore" and "Police Targetmaster." When you pick up one of those familar boxes and transfer the contents to your cartridge block, you know that you'll get all the quality, reliability and dependability that years of Remington research, plus untold thousands of accuracy tests, can give any ammunition.

Next time be sure yours is Remington "Palma Kleanbore" or "Police Targetmaster."

HOME-MADE Can Thrower

TOM AND I were talking it over. We wondered if we were getting all the fun there was to get out of shooting. Punching so many holes in targets almost made us forget there were other uses for guns.

It is always our custom to burn the used targets before we leave the range. That night, watching the tagboard turn to ashes, Tom lit a cigarette and asked "What did you ever do with that Rube Goldberg can-thrower you used to have?"

The last I could remember it was still in the basement. That night I dusted it off and made a few minor repairs.

Two mornings later we were on our way to the great sand stretches of the Lake Superior beach, loaded with cans, clay pigeons, a couple of pistols and lots of ammo.

We threw cans and clay pigeons and shot up plenty of ammunition, although no more than was usually expended in target shooting. The lack of practice at this phase of gunnery showed us up pretty badly, but we didn't care. This was real fun.

A couple of hours later we reluctantly stowed the "machine" into the car and turned towards home. Both of us had to admit that we'd had more fun than a barrel of monkeys.

Since then, local interest in my gadget has made me think that others, too, may want to know how to build a can thrower that works. I have prepared an isometric drawing of the one I have. This is not an exact duplication of mine, but shows how it would look if built of finished lumber, 2x4's that measure 1⅝"x3⅝" etc.

Here's how:

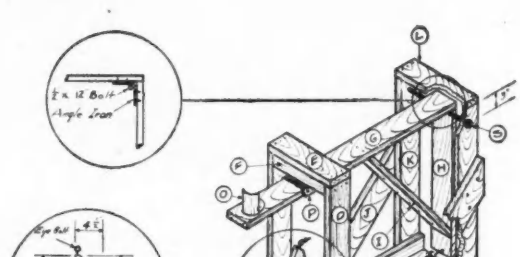
A—One 2"x8"x4' long
B—Two 1"x4"x4' long
C—Two 1"x4"x10" long
D—Two 1"x4"x2'6" long
E—One 1"x4"x11⅛" long
F—One 2"x4"x9⅜" long
G—One 1"x4"x3'3" long
H—One 1"x4"x2' long
I—One 1"x4"x1'7" long (long dimension)
J—Two 1"x4"x3' long (long dimension)
K—Two 1"x4"x2'6" long
L—One 1"x4"x11⅛" long
M—One small rope pulley
N—One length of rope to suit
O—One part of tin can nailed to throwing arm to contain the object to be thrown.
P—Rubber innertube to cushion blow of throwing arm against cross stop-bar.
Q—Three 16" screen door coil springs.
R—One short length of coil spring.
S—Two ½"x12" bolts—one for pivoting throwing arm and one for pivoting cocking piece (T).
T—One cocking piece made from 1"x6" stock—see insert for dimensions.

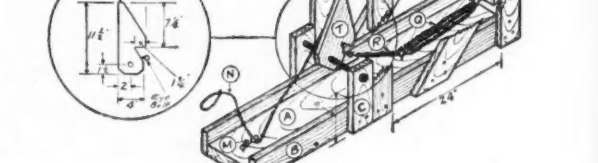
In addition—two large eyebolts are necessary to anchor the coil springs.

The illustrated can thrower is designed for throwing an object straight up. By altering the length of the front standards (D) the direction of pitch can be changed. The throwing arm (G) is cocked by pressing down on the end and engaging in the notch of the cocking piece (T).

With a little practice it is surprising how the average shooter can catch on to aerial shooting.

One thing though—safety comes before fun. Make sure your airborne bullets will have a safe place to land.—FRED M. SEGUIN.





THE OLD COACH'S PAGE

Of the two major factors used in shooting good match scores, one is animate and subject to all the vagaries of human nature. The other is wood and steel which can be manipulated as thought best by the human factor. No matter how good the rifle is supposed to be, however, attention to the proper maintenance of it is a requirement to proper functioning. Here are a few kinks used by one top-notch smallbore shooter in keeping his equipment in good working condition.

ARE THEY UNACCOUNTABLE?

"WHAT HAPPENED TO that shot?" seems to be the most frequently asked question in competitive rifle shooting. In some cases equipment can be blamed for faulty shots while the shooter himself must accept blame for a large number of others.

About the only way to check unaccountable shots is to make sure that flyers occur consistently. An occasional bad shot (perhaps one in five or ten thousand) can be charged off to experience and forgotten. If bad shots consistently appear on the target, however, it might be wise to check the shooting equipment being used.

But let's define 'the unaccountable shot'. There are many definitions of unaccountable shots or flyers, which may occur as either high or low shots, or merely as group-widening shots. I prefer to think of unaccountable shots as shots which just about double the size of normal groups fired at other times. In other words, shots that wander from the usual group pattern will be termed unaccountable. An example of a flyer would be the one unaccountable shot which would increase the size of a group from 1.3 inches center-to-center to about 2.3 inches.

The shooter who has trouble with flyers continuously should take steps to correct it. First, he should check himself. About the only way he can do that is by borrowing a fellow shooter's outfit and firing it to see what kind of results he gets with strange equipment. As a double check, he should have his own equipment used by another shooter, and compare results. If the results obtained with his equipment by both shooters are the same, he is probably having equipment difficulties.

Once the search has been narrowed down by learning that equipment trouble has been causing flyers, the shooter should begin a systematic check of all his equipment. He should check the simplest functions first, such as headspace, loose blocks, sights, front and rear hold-down screws, and other mechanical functioning. After that he should check the bedding of the rifle. Bedding is probably the most important phase in accuracy but it should be checked last as the other functions can be checked more simply.

When groups are dispersed vertically, headspace is usually at fault. Checking headspace is an easy matter and can be done very quickly. The standard headspace requirements fall between .043 inch and .046 inch, but a rifle will usually retain its accuracy with headspace up to .049 and .050 inch. The maximum figure for headspace for a .22 rimfire rifle, however, is considered to be .046 inch.

Of course, the shooter should always be sure to check the screws on his rifle to make sure that the barrel and action are held tightly into the stock. The screws holding the scope blocks and sight blocks should be turned firmly in place or shots might end up anywhere.

Next in line is sighting equipment. A good metallic sight is one which will move a known amount with known adjustment. The sight should have no backlash so that when a shooter wants to move the point of impact one-quarter inch at one hundred yards and he makes a one-quarter minute click adjustment, the sight will respond by moving the desired amount. A good check on an adjustable sight is to shoot a ten-shot group at one hundred yards and then move about twenty-five clicks to the right and shoot another group. Then move twenty-five clicks up and shoot another group. By repeating the process and moving the sight in increments of twenty-five clicks, the shooter should be able to come back to the original setting. If the group forms in the same group as the first group fired, the sight will check out fairly well. Of course, the front sight is assumed to be rigid and the inserts should be tight.

The same test for scopes can be made as for iron sights. However, there are more trouble spots to check in a scope but they can be checked fairly easily. When iron-sight scores are better than any-sight scores, the chances are that some little item in the scope is not up to par. First of all, check for parallax by focusing the scope for the desired distance and then focusing it on the target. The scope should be rigidly supported so that it will not move. With the scope focused on the target, the shooter moves his eye back and forth and notes whether or not the crosshair seems to move on the bull. If the crosshair does move, there is parallax in the scope. In order to correct parallax, the objective lens must be moved until the crosshair no longer moves with the movement of the eye.

Of course, the best check on the scope is to put it on a rifle of known accuracy and shoot it. If the results are not the same as previous results with the same rifle, then there is a possibility that something is wrong with the scope. A shooter who doesn't know optics is foolish to try to repair a scope; he should take it to a competent person who knows something about scopes.

The bedding of a rifle can be checked by pulling the barrel and action down into the stock with the hold-down screws when the bottom surface is covered with lampblack, Prussian blue or some other substance that will mark the spots where the barrel and action rest in the stock. If marked spots are few, they should be whittled down so the action will be firmly bedded. With a little experimentation, the shooter will probably be able to find a good bedding position.

A little work on the shooter's part can eliminate a lot of flyers. ♦ ♦ ♦

THE SPOTTING SCOPE -- August 1949

Range construction and improvement is at its highest level with clubs the nation over reporting progress in ambitious programs. . . . Trend seems to be leading toward hard-surfaced and covered firing lines . . . as hundreds of competitors are leaving some of this year's big regionals spoiled for "cow pasture" shooting, at least at major tournaments. . . . John C. Garand, inventor of the M1 rifle, was honored in June by Lehigh University with an honorary degree of Doctor of Engineering . . . while an honorary Doctor of Laws degree by Georgetown University went to NRA member Delfin Jaranilla, Philippine jurist and war hero. . . . The Honorable Thomas H. Burke, representative in Congress from the ninth district of Ohio, took time from his duties in the House to make a personal appearance before the Senate Committee considering the National Defense Establishment appropriation to urge that the Senate add enough money to make it possible to hold National Matches in 1949. . . . Massachusetts members also have a friend in State Representative Belden Bly, active opponent of restrictive gun legislation.

A Junior Conservation Camp, incorporating a rifle training program and similar to the projects already operating in Michigan and several other states, has been opened by the progressive Federated Sportsmen of Pennsylvania and the State Game Commission near Masseyburg, Pa. . . . Gun safety instruction is being included in Oklahoma's public school Health Education program. . . . NRA Director Chester S. Wilson has been named co-head of the Minnesota Department of Conservation's ninth annual Game and Fish Division training school. . . . J. W. Densford, father of Col. Charles F. Densford, of pistol shooting fame, died unexpectedly following a major operation in June. . . . The elder Densford was an enthusiastic booster of shooting, President of the Oklahoma State R & P Association in 1947 . . . and donor of the R. W. Densford Memorial Trophy. . . . Total number of clubs affiliated with NRA in first five months of year was running sixteen percent ahead of last year . . . indication that interest in shooting is not waning. . . . Biggest increases are shown in industrial, military, VFW, and fraternal groups on the senior side . . . and by summer camps, Boy Scouts, and secondary schools on junior side.

In New York State, where there is supposed to be a law against such things, the Bureau of Criminal Investigation is viewing with alarm the prevalence of "zip" guns in the hands of juvenile gangs . . . "dangerous weapons" made from toys, tape, inner tubes, etc. . . . Henry P. Davis has been named as manager of public relations at Remington Arms. . . . The City Council of Waco, Texas, in recognition of the Southwest Regional Small-Bore Championships on the beautiful Whitaker Range there, staged a barbecue for the 99 competitors. . . . Herman Dean, Huntington, W. Va., publisher, is publicly calling for less game shooting and more target shooting among the nation's hunters . . . with conservation of game as the peg. . . . Hollywood (Fla.) Rifle and Pistol Club members are sold on the weekly Sun-Tattler and the Fort Lauderdale Daily News for their effective support and interest in the club's programs. . . . H. N. Sarkar, Deputy Inspector-General of Police, West Bengal, India, and president of NRA's first affiliated non-resident rifle club in India, the South Calcutta Rifle Club, has organized two more clubs in his province . . . and with the help of NRA member Nripen Sarkar is gradually popularizing the rifle movement in Independent India. . . . Look for competition from Indian shooters in the 1952 Olympics. . . . "The March of Time," filming "Present India", for release soon, recognized the growing sport . . . especially from the women's angle.

Shooters around Portland, Me., are grateful to Colonel Gumpert, commanding officer of harbor defenses, for installation of a modern, new twelve-point rifle range at Fort Williams . . . available to civilians and installed by Fire Chief Fred Fleury, a member of the Maine State Rifle Instructors' Club. . . . Added attraction for the 1949 NRA Convention in Denver . . . will be a super barbecue for all delegates, to be tossed by the Redfield Gunsight Co. . . . A record attendance is virtually assured for the five-day meeting, October 17-21 . . . so make reservations early.

Ray Stann

Twelve Regional Champs Named; Benner, Mercer Have High Scores

As this edition of THE RIFLEMAN goes to press, seven of the eleven small-bore regional championships and five of the eleven pistol events have been fired. Below are capsule reports of all completed championships.

SOUTHEASTERN PISTOL

Jerry Fontanella, Miami Beach, Fla., was the surprise winner of the Southeastern Pistol Championship held at Jacksonville, Fla., June 24-25-26. His three-gun aggregate of 2535 topped a field of 77 competitors as Walter Fletcher, Parris Island, S. C., finished second with 2532. Mark Billing, Quantico, Va., finished third with the same total as Fletcher but was edged out in the rapid-fire stages. The class silver went to A. M. Acosta, Jacksonville, Fla., high Expert with 2457; H. B. Reed, Parris Island, top Sharpshooter at 2385; and Mrs. Foster Ingalls, Hallandale Fla., best Marksman and high woman at 2285.

NORTHEASTERN PISTOL

Traveling north to Poughkeepsie, N. Y., July 2-3-4, from his home-base at Quantico, Va., Captain Thurman Barrier assured himself of a free trip to Chicago over the Labor Day weekend by taking the Eastern Pistol Championship with a three-gun aggregate of 2569 over 158 competitors. Lt. Col. N. J. Rodeheffer, Arlington, Va., held on to second place by one point over James R. Herron, Schenectady, N. Y., with 2537. Class honors went to: High Expert, Julian Zuk, Boston, Mass., 2454; high Sharpshooter, Roger Robinson, Staten Island, N. Y., 2399; and high Marksman, Malcolm Hinckley, Blue Hill, Me., 2135.

ROCKY MOUNTAIN PISTOL

In the rarefied atmosphere of Denver, the 1949 NRA Convention City, Paul Emmett Franklin, Albuquerque, N. M., posted a 2526 to take top silver and the Rocky Mountain Championship over 80 competitors. In spite of his low score, Franklin had an easy time of it, July 8-9-10, as no other shooter could top 2500. Second place aggregate winner George E. Irwin, Los Animas, N. M., posted 2578 and was followed by R. B. Larson, Albuquerque, at 2467. Irwin was also the high Expert, while high Sharpshooter honors went to Eugene Bethea, Lowry Field, Colo., with 2375, and Merling Murphy, Los Animas, led the Marksmen with 2285.

MIDWESTERN SMALL BORE

With his very lovely daughter cheering him on every step of the way, Ralph W. Travis, Waterloo, Iowa, took the Midwestern Small-bore Championship at Des Moines, June 25-26, with a grand aggregate of 3183-205X. Kyle W. Snowhill, Quincy, Ill., matched Travis' X count but fell three points short on the front end of the score to take second. Last year's midwestern champion, John Moschkau, Waterloo, held third with 3178-193X. The trip was not a complete flop for Moschkau as he took the any sight silver with 1594-110X. Besides the top prizes, Travis also carted home the metallic silverware with a 1589-99X. Ruth Dorian, Kansas City, Mo., was high woman at 3151. Class honors went to Joe L. Bennett, Des Plaines, Ill., 3175-185X, high Expert; Dixon Herman, Omaha, Neb., 3151, high Sharpshooter; and Fred Melander, Chicago, Ill., 3128, high Marksman.

MID-ATLANTIC PISTOL

T/Sgt. Huelet Benner, Ft. Knox, Ky., served notice to Harry Reeves that he is all set to give Harry the fight of his life for the 1949 National All-Around Pistol Championship at Ft. Sheridan later this summer by firing a hot 2603 at Quantico, Va., July 2-3-4. Benner easily walked away with the top prizes, as second place finisher J. A. Jagiello, Quantico, Va., posted 2566. Third place among the 220 shooters went to Phillip Roettinger, Hartford, Conn., with 2553.

Class honors in the Grand Aggregate went to: High Expert, L. G. Vance, Ft. Bragg, N. C., 2538; high Sharpshooter, R. H. Hagan, Quantico, Va., 2386; and high Marksman, R. T. Van Keuren, Arlington, Va., 2380.

SOUTHWESTERN PISTOL

The records of the Southwestern Championship fired at Dallas, Texas, July 2-3-4, had not yet reached the office when this edition went to press. No class winners are available but the top three men in the Grand Aggregate were: William T. Toney, Kingsville, Texas, 2563; Jesse Woody, Stanton, Texas, 2542; and Tom Parks, Dallas, Texas, 2534.

SOUTHWESTERN SMALL BORE

All but rained out by a deluge of unseasonal Texas rain, a field of 99 at the Southwestern Regional Small-Bore Championships, at Waco Range, Waco, Texas, crowned Bob McMains, of Dallas, as the titleholder and trip winner for 1949.

The consistent McMains led all the way over the two days, June 25-26, although both the any sight and metallic sight aggregates eluded him. His score was 3178-193X, three points higher than Hugh White, also of Dallas. George Whittington, of Amarillo, was third with 3174, while Mrs. Edith Reuter, of Houston, made the men hustle by scoring 3173, good enough for high woman honors.

Silver for the any sight aggregate was taken by host club shooter George Weddington, who out X'd McMains with 1593-104X. Metallic sight honors were taken by White, with 1588.

Class winners in the grand aggregate were: High Expert, Henry Howard, Houston, 3167-175X; High Sharpshooter, W. A. Campbell, Bloomington, Ill., 3165-178X; High Marksman, B. L. Cook, Corsicana, Texas, 3139-135X.

NORTH CENTRAL SMALL BORE

Under a blistering sun with temperatures running over 100 degrees, Donald Mercer, of Akron, Ohio, fired an equally sizzling score of 3193-245X to trim the season's largest regional field for the North Central Small-bore Championship at Chief Wa-Ke'-De Range at Bristol, Ind., July 2-3.

The new champion needed every point as Bob Rarick, of Dayton, matched him all the way and only fell into second place on the basis of X's. William Schaad, of Ashland, Ohio, was fired third with 3189.

Mercer dropped only four points in the four metallic sight matches to win that aggregate by one point over Rarick and dropped his other three with the telescope to finish third behind Schaad, who had 1599 and Rarick with 1598.

FAR SOUTHWESTERN SMALL BORE

Charles Cornish, Los Angeles, Calif., became the first 1949 regional champion by winning the Far Southwestern Small-bore Championship at Phoenix, Ariz., on June 4-5. He turned in a grand aggregate of 3172-217X. Otto Marchmann, Pasadena, and Dick Burkhart, Redondo Beach, made it an all California finish by taking second and third. Marchmann punched the target for a 3170-190X while Burkhart turned in a respectable 3157-171X. Cornish and Marchmann split the silver for the any sight and metallic aggregates, Cornish taking the any with 1593-121X and Marchmann the metallic with 1587-93X.

Class honors in the grand aggregate went to: High Expert Domenic Carapellese, Phoenix, 3154-167X; high Sharpshooter Walter Hine, Phoenix, 3128-132X; and high Marksman Charles DeBarr, Phoenix, 3150-155X.

NORTHEASTERN SMALL BORE

The Northeastern Small-bore Championship fired at Middlefield, Conn., July 9-10, turned up a "believe it or not" situation. Art Jackson, Brooklyn, N. Y., won both the any sights and metallic aggregates and yet did not take the grand aggregate. His 3171-199X was just one point short of Dr. I. N. Tekulsky's, New York, N. Y., 3172-169X. For some reason unknown, Tekulsky failed to enter the sub-aggregate matches. Ed. Cushing, Fairmont, N. H., placed third in the grand aggregate with 3161-186X. While the big prize escaped him, Jackson took the any sights with 1589-104X and the metallic with 1582-95X. Class winners in the field of 150 which fired on two windy days with rain added on the second day were Stephan Mallner, L. I., 3150-161X, high Expert; James Lantelme, L. I., 3154-147X, high Sharpshooter, and Fred M. Bedell, Pleasant Valley, Conn., 3105-110X, high Marksman.

NORTHWEST SMALL BORE

Anaconda, Montana, played host to a regional championship for the first time in history on July 2-3, and let an easterner walk away with the Northwest Championship. Robert Sinclaire, Palm Beach, Fla., outshot the field with a 3173 to take the crown. Second place went to the other coast as Fred Dinkin, Alhambra, Calif., finished second with 3172. Incomplete results received from Anaconda show that Tressa Dodge, Boise, Idaho, was high Expert with 3156; Richard Dodge, Boise, high Sharpshooter with 3141, and Henry Hignight, Dillon, Montana, high Marksman with 3142.

ROCKY MOUNTAIN SMALL BORE

John Kelly, Jr., Fort Worth, Texas, took two days off from his honeymoon, June 25-26, to win the Rocky Mountain Small-bore Championship at Denver with a score of 3181-202X. Richard Hanson, Michigan City, Indiana, finished second in the field of 126 with 3170-199X while William Kiplinger, Steamboat Springs, Colo., rounded out the first three with 3169-199X. Hanson and Kiplinger were also high Expert and high Sharpshooter respectively.

Denver Readies For NRA Convention

Denver, Colorado, host city to the 1949 NRA Members Convention from October 17 to 21, is all set to give American shooters the time of their lives when they arrive in the high altitude city for their second annual gathering. The RIFLEMAN recently sent a reporter to the mile-high town for the full story. This is what he brought back.

"It would have been difficult to pick a better spot for the Second Annual Convention. Denver is the transportation hub for East-West travel. Whether a traveler goes by car, train or air, he almost always crosses the Continental Divide at Denver. Its position at the crossroads of the State is reflected in the facilities and accommodations that Denver has for travelers. There are attractve motels for travelers who come by car within a few minutes drive of the convention hotel. Several of them specialize in families with children, to the extent of providing large, completely-equipped playgrounds and full-time children's nurses so that Mother and Dad can be free to go to things like conventions.

Lists of the motels are available from the Convention Housing Committee, 519 17th Street, Denver. The Committee, upon request, will make a reservation for you at a motel convenient to the convention headquarters.

The hard-working housing committee already has made over 100 advance hotel reservations for members and requests are arriving in every mail.

Fortunately, Denver has no shortage of good hotels. There are two excellent ones, the Brown Palace and the Cosmopolitan, within one-half block of the Shirley-Savoy, which will be convention headquarters. Many other equally good hotels are within five minutes walk.

The Shirley-Savoy is really two hotels in one. It combines beautiful modern convention meeting and exhibit facilities with a comfortable, oak-stained, western atmosphere which is as much in place as pointed, high-heeled boots. Sport clothes are the mode and you will eat in the dining room many times if you like steaks and Western beef at their biggest and best.

The convention manager at the Shirley-Savoy is Izaak Walton, a man every sportsman should meet. He is a direct descendent of the famous angler himself. In an hour-long conversation with him on ways and means, punctuated with, 'Can we do this?' and 'Can you do thus and so?', he finally answered, 'If there is anything the National Rifle Association wants from the Shirley-Savoy and doesn't get, it is only going to be because they didn't ask for it.'

The handsome Lincoln and Colorado rooms of the Shirley will house approximately 53 commercial exhibits, one-half as many again as in Washington last year. Many famous manufacturers, gunsmiths and supply houses are located in and around Denver—the Colorado Saddlery Company, the Redfield Gun Sight Co., Tilden Manufacturing Co., the Heiser Saddlery Co., the Colorado Gunsmithing School and many other excellent gunsmiths. All are enthusiastic about having the NRA Members Convention in Denver and many will be represented in the exhibits.

Entertainment is a big feature of every convention and Denver issues a challenge to the south's monopoly on hospitality. Owen Tytegraff, Watt Redfield of the Redfield Gun Sight Co., and Ed Hunter of the *Denver Post* have arranged a real western barbecue. The Redfield Gun Sight Co. will stage for all NRA members at the convention a complete barbecue with real Western color and trimmings. The whole shindig will be held inside the Field House of Denver University. There may be a bigger building than the field house in Denver but this one will hold a barbecue with room left over to lose a small-bore rifle range.

Other willing and anxious hosts to the convention are the forty rifle and pistol clubs within the Denver city limits . . . also, the Colorado State Rifle and Pistol Association and such well-known local shooters and NRA officials as Lloyd Markle, John Schooley, Oscar Mains, Ben Radinsky, Gail Bahr and others.—FRANK DANIEL.

LEGISLATIVE BULLETIN

Since last month's "Legislative Bulletin" was published (July RIFLEMAN, page 27), three more state legislatures have adjourned (California, Delaware and Michigan), four new bills were introduced and, in Michigan, one bill was approved by the governor. So far as we have been able to ascertain, all bills previously reported in California and Delaware died with the adjournment of the Legislatures. Below is a report of the present legislative picture in the United States. Where not given here, contents of previously reported bills are as reported in the July RIFLEMAN.

Alabama—House Bill No. 239. *Action:* No change.

Senate bill No. 41. *Action:* Referred to Judiciary.

Illinois—House Bill No. 712. *Action:* No change.

House Bill 728, by Representatives Skyles and Gray, reported in June, amends law relating to deadly weapons to make any firearms deadly weapons. *Action:* Tabled in Senate & House.

House Bill 1106, reported in June as a substitute for House Bill 712 and 728 would regulate the sale and transfer of pistols, prescribe penalties for committing certain crimes when armed and limit probation and parole of persons convicted of violation. This bill is not objectionable. *Action:* To third reading in House.

Massachusetts—Senate Bill 97. *Action:* No change.

Senate Bill No. 31, introduced by Senator Odence, reported in May, restricts the issuance of sporting & hunting licenses issued to minors. *Action:* Referred to next annual session in Senate & House.

Michigan—Legislature adjourned June 24.

House Bill No. 53. *Action:* No change.

House Bill No. 149. See action on Senate Bill 99 reported below.

Senate Bill No. 99, by Senators James Milliken and Frank Heath, is the Senate version of original House Bill 149 (see above). Senate Bill No. 99 would prohibit the possession, in any area frequented by wild animals or wild birds, of any automatic, semi-automatic or autoloading shotgun or rifle larger than .22 rim fire capable of holding more than 6 shells. *Action:* Approved by Governor.

Ohio—House Bill No. 11, reported in March. *Action:* Passed in House February 21. Reported favorably in Senate.

Texas—House Bill 403, by Representative Willis, reported in June. Makes it unlawful for any person who has been convicted of a felony to have in his possession firearms of certain types or burglary tools of certain types while away from premises on which he lives. *Action:* Passed in House. Reported favorably in Senate.

Wisconsin—Senate Bill No. 474. *Action:* To third reading in House.

Assembly Bill No. 184. *Action:* No change.

DCM NOTICE

To Secretaries of Clubs affiliated with the DCM: The *Annual Inventory of U. S. Property* in the hands of rifle clubs and the *Annual Report of Firing* have not yet been received from a good many clubs. The forms for submitting these reports are mailed to clubs in October, November, and December of each year.

Regulations require that the two reports be obtained from every club on the rolls of the DCM each year.

Failure to send in these reports causes a great deal of unnecessary correspondence by the Office of the DCM. It prevents the club from receiving rifles, ammunition, target material and other items that they may have requisitioned. Finally, it may cause the club to be removed from the rolls of the DCM and property withdrawn.

Some other errors which are of frequent occurrence and cause extra correspondence and delay to clubs are the following: Failure to reply to correspondence from the DCM; failure to follow instructions for filling out forms and reports; failure to send to the DCM *signed* shipping documents for property received or to report immediately any shortage or damaged articles in shipments; failure to pick up shipments sent from ordnance arsenals; failure to notify the DCM regarding a change of secretary or change of address; failure to keep NRA affiliation up to date.

Careful attention to these matters by the secretary of the club will enable the Office of the DCM to furnish prompter service and avoid confusion and delay for the club. The number of senior and junior clubs and schools affiliated with the DCM is now over 3,000. It is the largest number ever carried on the rolls despite the dropping of approximately 100 clubs for various reasons in the last six months.

New prices have been established by the Ordnance Department on the following ammunition and components:

Cartridges, cal. 22 L.R., per case of 10,000 rounds—$71.70, plus 11% excise tax.
Bullets, cal. .45, per thousand—$11.70.
Primers, cal. .45, per thousand—$3.25.
Primers, cal. .30, M2, per thousand—$3.15.
Powder, IMR, per pound—$1.00.

AN OLD FRIEND RETIRES

One of the "unsung heroes" of the shooting game in America quietly retired from active service on July 31st. She is Miss Sadie Roberts, Chief Clerk of the Office of the Director of Civilian Marksmanship. She joined the D.C.M. force in August, 1913, soon after sales and issues to civilians were authorized

by Congress and has been the counselor to a long succession of Directors of Civilian Marksmanship through the intervening years —Major LaGarde, Colonel Stodter, Colonel Coward, Colonel Endicott, Colonel Mills (now dead), Colonel Sloan and Colonel Strain. Although her name has never appeared on official papers and she was personally known to only a few of the old-timers at the National Matches, every rifle club which has drawn government equipment, every man who has purchased a bargain Krag, Enfield or Springfield has directly benefited from the friendly, loyal services of Sadie Roberts. She carries into retirement the sincere good wishes of all with whom she has served including the entire official family of the NRA.

NATIONAL GIRL CHAMP

Any girl on the West Coast, or in the whole country for that matter, will have to go some to beat the record set by 16-year-old Marlene Bellinger, of Seattle. Last year Marlene fired 182, prone and standing, to win the National Girls' title. This past spring she again won top rating with a record 189. The latter score was the seventh high ranking among both girls and boys firing in the 1949 NRA

National Junior Rifle Championships. A mighty big accomplishment when you consider that 2435 young sharpshooters were competing against her. Marlene was also a member of the National Championship team.

High girl for Washington State, winner of the Leonard Sherman trophy for high girl for Oregon State, high junior and high girl for Department of Washington, V.F.W., and team member of the group winning the 6th Army Command Hearst Trophy are a few other outstanding exploits of the Seattle girl —a real Annie Oakley from the great Northwest.

Clubs and COMPETITORS

Twenty junior riflemen and four junior teams competed June 12th in the second annual Junior Outdoor Rifle Tournament at Michigan City, Indiana. Ronald Hasselfeldt, of La Porte, member of the Michigan City Junior Club took possession of the Buscher

MILLER **KODIAK** MOUNTS

STOP! — Don't Drill That Rifle!
WAIT! — Don't Cut That Stock!

Require no hole-drilling, metal-cutting, stock-butchering! INSTANTLY attach-detach, with ONE gloved hand, Zero RETAINED. Four adjustments: Elevation, Windage, Eye-relief, Height. Permit use of non-adjustable OR adjustable hunting scope. Selective LOW or HIGH position to clear receiver peepsight. LIGHT * STREAMLINED * SHOCK-ABSORBING * COMPACT * RUGGED. One model fits practically all high-power hunting rifles. 4½ years development & testing by expert rifleman - engineer. Worthwhile discarding your present mount for a new KODIAK. KODIAK mounts have MORE FEATURES than all others COMBINED! WRITE for list. Delivery soon. Price $20.00. Order. NOW!

MILLER ARMS LABORATORY
P.O. Box 91-A • Poughkeepsie, N. Y.

for the **SOUTHPAWS!**

A NEW ANSWER to the problem of converting bolt actions to left hand operation. FN or M98 Mausers (only) converted, without disturbing the temper or safety features built into the action by the manufacturer. *AS SAFE AS THE ORIGINAL ACTION BEFORE CONVERSION,* and with the same speed and smoothness of operation. A limited number of actions available for immediate barreling and stocking.

Custom rifles in right or left hand operation built to your specifications with caliber, twist and barrel weight optional and stocked in figured, seasoned walnut, hand inletted throughout.

A sporting goods dealer, who was one of our first conversion customers writes: "The 30-06 is the finest piece of shooting merchandise I ever handled. Please make up an exact duplicate for me in .270 caliber."

Write us in detail what gun you want, for price estimates.

ROY GRADLE 205 West Islay Santa Barbara, Calif.

NOW **GUNSLICK KITS** IN STEEL

No Increase In Price TO KEEP GUNS FACTORY NEW

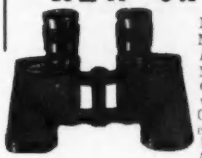
Precision Duraluminum Cleaning Rod, Tips and Brushes, Solvent, Gunslick, Patches, Oil, all in Lifetime Steel Kit.
Shotgun Kits—$2.75
Rifle Kits—$2.50
Order Your Kit Today!
Col. Whelen's "Tips to Shooters" FREE.

Tray Removable

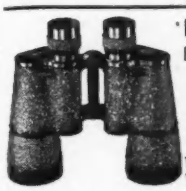
OUTERS LABORATORIES, INC.
Dept. AR-8 ONALASKA, WISCONSIN

LIFETIME GUARANTEE CERTIFICATE SENT WITH EVERY BINOCULAR

NAVY Coated NEW 6 x 30 $48.95



Made for the U. S. NAVY. *They Had to Be Good!* BRAND NEW. Lightweight *Coated Optics.* Individual Focussing. Complete with leather case, and straps. *WATERPROOFED!* Add 20% FEDERAL TAX.



MILITARY TYPE BINOCULARS

6x15 — $19.95
6x30 — $27.75
8x30 — $34.75
7x50 — $44.00
7x50 Coated — $52.50
10x50 — $55.00
10x50 Coated — $65.00

Made to rigid military specifications. Seven to choose from. For top quality performance, consider these all purpose six, seven, eight and ten power prism binoculars. All have superb optics, lightweight metal bodies. Individual focussing. Moisture and dust proofed. These **brand new** glasses come complete with genuine leather, plush lined case and straps. Coated price means **entire optic system is precision coated.** Superb binoculars. Add 20% FOR FEDERAL TAX.

6 X 30 U. S. ARMY
Fully reconditioned and refinished like NEW! Individual focussing. 6x30 binoculars made for the U. S. Army—they had to be good! Complete with NEW case and straps. ADD 20% for Federal tax. **37.50**

BINOCULAR BARGAINS (4-16 POWER)

4x40 Airguide. New	$ 9.00
5x40 Airguide. New	24.00
6x30 Bausch and Lomb. Like new	39.50
6x30 Steinheil. German. Featherweight—Coated	52.95
6x30 Bausch and Lomb. U. S. Navy. New. Coated	69.50
6x30 U. S. Navy. Coated. Waterproof. M33. New	54.50
6x30 Universal. U. S. Navy. Used	42.50
6x30 Universal. U. S. Navy. Coated. Used	52.50
7x50 German Hensoldt. Coated. Used	115.00
7x50 U. S. Navy M32. New. Coated	78.00
8x30 German Carl Zeiss. New. Coated	98.00
8x30 Monte Carlo. New	31.95
8x32 Military type. New. Coated. 16 oz.	39.50
10x50 Bausch and Lomb or Hensoldt. Used	99.50
10x50 American Super Eye. Coated. New. 27 oz.	105.00
10x38 Monte Carlo. New	54.50
12x50 American Super Eye. Coated. New. 28 oz.	114.00
12x38 Monte Carlo. New	64.50
16x45 German Carl Zeiss. Used	149.00
16x45 Monte Carlo. New	77.50
16x56 German Hensoldt. New. Coated	216.00
30x53 Carl Halle Telescope. New. No Tax	29.50
10x-20x-30x-40x Variable Telescope. New. Coated. With case	47.50

BINOCULAR CASE and STRAPS INCLUDED WITH ALL GLASSES. ADD 20% FEDERAL TAX

NEW LEATHER BINOCULAR CASES
FOR 6x30 — $5.00. FOR 7x50 — $7.00

MONEY BACK GUARANTEE.

Use at our risk and expense! If not fully satisfied, return for a full refund. ORDER TODAY! Send $2.00 deposit and we will ship C.O.D. for the balance. Cash orders shipped prepaid.

UNITED PRODUCTS CO.
7941 So. Halsted Dept. ARF-3309 Chicago 20, Ill.
(Reference Dun & Bradstreet)

Aim Faster! Aim Straighter! with the NEWLY developed *Dockendorff* GOLD POST FRONT SIGHT
(for all rifles with standard 3/8" dovetail and no ramp)

RC435 only $3.00 POSTPAID

Most authorities agree that a square-topped blade front sight is the most accurate for use with a peep or adjustable open rear sight. 17° bevel of simulated gold inlay picks up maximum light without glare. Smoked black with match makes perfect target sight. This true aiming sight can be quickly installed or removed in the field. Always carry one for a spare. One model only — post height .433", post width .070". Equip your gun now and have your biggest season! *All models sold with money-back guarantee*

Dockendorff & Co., Inc., Oronoque, Conn.
Makers of the famous Gold Bead Front Sight

DOCKENDORFF, ORONOQUE, CONN.
Please send me postpaid:
☐ RC435 Gold Post Front Sights at $3.00
I enclose check or M. O. for $.....
☐ Send details of other famous Dockendorff Sights
Name.....
Address.....
City.....State.....

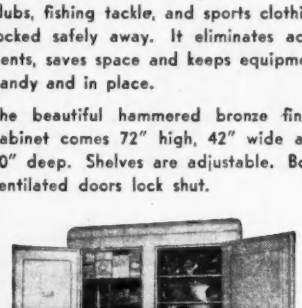
Atlas

SPORTSMAN'S STOWAWAY

Every sportsman needs this practical, roomy and ornamental cabinet to protect his valuable equipment.

The STOWAWAY keeps guns, shells, golf clubs, fishing tackle, and sports clothing locked safely away. It eliminates accidents, saves space and keeps equipment handy and in place.

The beautiful hammered bronze finish cabinet comes 72" high, 42" wide and 20" deep. Shelves are adjustable. Both ventilated doors lock shut.



You'll want all the dope on the STOWAWAY. See your sporting goods dealer or write direct for literature and complete information.

Shipped knocked down, ready to assemble and prepaid for only $79.50

Distributed by

BLAKE SPECIALTIES

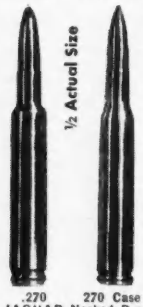
Backus, Minnesota

SANTA MONICA GUN & ROD SHOP

THE HOME OF FINE CUSTOM RIFLES

Builders of the SATURN CUSTOM RIFLE

Developers of the New .270 I.C.L.* JAGUAR



- Flat Trajectory
- Accurate
- Consistent
- Tested at All Ranges

Our Answer to Tested Performance

100 Grain Bullet

—Trajectory and Groups—	Vert.	Horiz.	
R'nge	Spread	Spread	Drop
100	I.	1.0625	0.
200	1.50	2.4375	—1.
300	3.6875	2.750	—5.25
400	4.375	5.3125	—16.50
500	5.375	9.125	—42.

* Increased Capacity Load

.270 JAGUAR Necked Down 270 Case

Your Satisfaction our guarantee

ARNOLD JUENKE VERN JUENKE

2311 PICO BLVD. SANTA MONICA, CALIF.

GENUINE COLT SINGLE ACTION FRONTIER MODEL PISTOLS

- 45 Calibre Only!
- 4¾-in. Barrels—Blue Finish!
- Serial No.'s About 350,000.

EXCELLENT $75.00

VERY GOOD $65.00

Most of these stored in grease nearly 10 years. Probably never again will you have an opportunity to own one of these famous old peace-makers at such extremely low prices. Sold on money-back guarantee. Send money order or cashier's check.

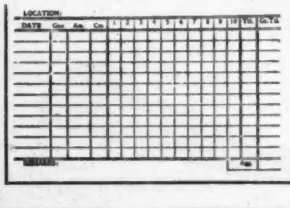
Alamo Leather Goods Co.

119 S. Flores St. • San Antonio, Texas

.257 BULLET TROUBLE?

Don't junk your Roberts! Try our hand-swaged, thin-jacket, 75 grain .257 Varmint Bullets. Also 60, 87 and 100 grain, made in Banta 2D Dies. FIVE SAMPLE BULLETS, 25¢ Postpaid. BANTA BULLET DIES, .224 and .257, $40 Postpaid. Core Seater, $4.00. Lead Cutter $5.00.

ROY DAVISSON • Route 6 Lima, Ohio



YOU NEED THIS NEW PISTOL SCOREBOOK

- 45 pages 3⅝" x 5⅝" (Reproduced in miniature at left).
- A real asset to serious handgun enthusiasts.
- Handsome cover featuring pistol illustration and place for name of owner.

Price 35¢ per book — Three books for $1.00, plus postage. Special price in wholesale lots.

Order from:

GRAHAM PRESS • 9016 NE Sixth Ave. Miami, Florida

SENSATIONAL NEW "PACKALL"

Motorized Mountain Climber

for hunters, fishermen, prospectors, surveyors. Straps on like a pack sack. Over 2 horse power, 22 lb. engine that will pack your load in the roughest country—and push you up the hills.

F.O.B. Seattle **$128.50** zipper carry case **$5.50**

Inquire your Sporting goods store

—Write **PACKALL CO.**, 160 River St. Seattle 8, Wash.

Trophy by repeating his 1948 victory in the aggregate match. Matches were fired over 50-yard, 100-yard, and Dewar courses. The team match (Dewar Course) went to the Michigan City Juniors with the Urbana Junior Rifle Club second and Fort Wayne-La Porte third.

☆ ☆ ☆

Results of the First Annual Invitational Northern Brookhaven Township Junior Individual Outdoor Championship Tournament have been announced. Fired on Long Island under the sponsorship of the Port Jefferson Rifle and Revolver Club, the tournament was unique in that the program included a 200-yard match—a real test for young riflemen. R. Abbott, of Port Jefferson, won the 50-meter, 100-yard and the 200-yard events. He captured the aggregate with 385-10X, an average of 96.25 per ten-shot string. His winning score at 200 was 94-1X. D. Selleck won second place honors in the aggregate and first in the 50-yard event.

☆ ☆ ☆

The following list includes all junior riflemen issued the NRA Junior Distinguished Rifleman qualification rating during June. New York State certainly dominates this month's list and we note with surprise the absence of feminine names:

Robert W. Ester, St. Albans, New York
Donald Ester, St. Albans, New York
James Carter, St. Albans, New York
William J. Echols, New York City, New York
Herbert Kennedy, Jamaica, New York
Darrel White, Washington, D. C.
John Spenard, Waterford, New York
John Perparas, Kansas City, Missouri
Milton Neitzy, Washington, D. C.
F. E. Neiderlander, Johnstown, Pennsylvania
Richard Greenalch, Troy, New York
J. Wing, Phoenix, Arizona
Alfred Monroe, Akron, Ohio
Robert W. Johnson, Grand Haven, Michigan
Kuhl Marshall, Provo, Utah
Charles Andrew Headley, Alton, Illinois
Harry Audley, Jr., Westport, Connecticut
John F. Howard, Manhassett, New York
Philip Grausman, New York City, New York
Otto Grote, Rangeley, Maine

COMING EVENTS

Regional Championship Tournaments (Class A) and State or Division Championships (Class B) only are listed below. All other NRA Registered Tournaments are listed in a printed schedule that will be sent to any shooter upon request. Send your request by letter or penny postcard to the National Rifle Association, Competitions Section, 1600 Rhode Island Avenue, N. W., Washington 6, D. C.

Tournaments requiring advance entries are indicated by (Adv.). Tournaments limiting the number of entries that can be accepted are indicated by (Ltd.).

Always write to the tournament sponsor for a program in advance of any Registered Tournament you plan to attend. It is your assurance that you will know all of the details and the tournament conditions.

AUGUST

***7 (C)** NORTH DAKOTA—Lake Region .30 Caliber Rifle Tournament at Camp Grafton. Carl Morse, 422 5th St. South, Devils Lake, N. D. *(Correction)

6-7 (B) TEXAS—Third Annual Permian Basin Small Bore Rifle Tournament at Odessa, Texas. C. W. Sellon, 1003 North Graham Avenue, Odessa, Texas (Adv)

5-6-7 (B) WASHINGTON, D. C.—United States Park Police Fifth Annual Pistol Tournament at Washington, D. C. Captain M. H. Rasberry, United States Park Police, Room 1215 Interior Building, Washington, D. C.

6-7 (B) LOUISIANA — Louisiana State Pistol Tournament at Shreveport, Louisiana. J. H. Flournoy, P. O. Box 1094, Shreveport, Louisiana. (Adv-Ltd)

6-7 (A) OREGON—Northwestern Regional Small Bore Rifle Tournament at Portland, Oregon. Herbert T. Brown, 7159 S. W. 4th Avenue, Portland 1, Oregon (Adv Ltd)

14 (B) MINNESOTA—Minnesota State Pistol Championship at St. Paul. Cy B. Woods, 2048 N. Cleveland Ave., St. Paul (Adv)

12-13-14 (A) ARIZONA—Regional Pistol Tournament at Prescott, Arizona. Mack Weiss, Box 1024, Prescott, Arizona (Adv-Ltd)

13-14 (B) NEW YORK—Western New York State Small Bore Rifle Championship at Auburn, New York. Herman Dickman, 214 South Seward Avenue, Auburn, New York.

13-14 (B) INDIANA—Indiana State Pistol Tournament at Bristol, Indiana. Mrs. Garnette R. Horner, 135 South Scott Street, South Bend, Indiana (Adv-Ltd)

13-14 (B) OHIO—Ohio State .30 Caliber Rifle Championship at Camp Perry, Ohio. Ray T. Bayless, 7301 Euclid Avenue, Cleveland 3, Ohio (Adv)

14 (B) MARYLAND—Maryland State Small Bore Championship at Stemmers Run, Maryland. John E. Ruppert, 42 East Heath Street, Baltimore 30, Maryland. (Adv-Ltd)

13-14 (A) TENNESSEE—Southeastern Regional Small Bore at Chattanooga, Tennessee. Paul Zenns, 808 South Moore Rd., Chattanooga, Tenn. (Adv-Ltd)

20-21 (B) OHIO—Ohio State Individual Small Bore Championship at Mt. Gilead, Ohio. John R. Lang, 3498 Meadow Avenue, Cincinnati 11, Ohio (Adv-Ltd)

21 (B) MONTANA—Montana State Pistol Championship at Butte, Montana. Dr. Robert Englert, 1405 4th Avenue, Great Falls, Montana (Ltd)

19-20-21 (A) CALIFORNIA — Regional Pistol Tournament at Bakersfield, California. Captain LeRoy F. Galyen, California High Patrol, Bakersfield, California (Adv-Ltd)

20-21 (B) NEW YORK—New York State Small Bore Rifle Championship at Bethpage, New York. V. B. Cleaver, P. O. Box 356, Hicksville, Long Island, New York (Adv-Ltd)

20-21 (B) OHIO — Third Annual Ohio Pistol Tournament at Columbus, Ohio. Lt. A. L. Schmeig, 368 East Kanawha Avenue, Worthington, Ohio (Adv-Ltd)

21 and 28 (B) HAWAII—Territorial Small Bore Rifle Championship at Honolulu, Hawaii. George Premo, 2323-B Ala Wai, Honolulu 37, Hawaii.

21 (B) WISCONSIN—Fifteenth Annual Wisconsin State Small Bore Championship at Racine, Wisconsin. Dexter F. Rhodes, 3828 West Sheridan Avenue, Milwaukee 9, Wisconsin (Adv)

27-28 (B) GEORGIA—Second Annual Georgia Carolina Rifle Tournament at Augusta, Georgia. O. J. Barrett, Jr., Route #1, Augusta, Georgia (Adv-Ltd)

27-28 (B) MICHIGAN—Michigan State Pistol Championship at Milford, Michigan. Walter LaMoria, Brighton, Michigan (Adv)

28 (B) NEBRASKA — Nebraska State Pistol Tournament at Lincoln, Nebraska. H. H. Buis, 1312 North 35th Street, Omaha, Nebraska.

27-28 (B) NEW HAMPSHIRE—New Hampshire State Rifle Championship at Plainfield, New Hampshire. Wallace G. Pickering, Plainfield, New Hampshire.

28 (B) ILLINOIS—Illinois State Small Bore Championship at Naperville, Illinois. Mrs. Lew Mason, 473 Oak Avenue, Aurora, Illinois (Adv)

SEPTEMBER

4 (B) KANSAS—Sunflower State Small Bore Rifle at Topeka. Archie Marshall, 1324 N. Monroe, Topeka, Kansas

3-4 (B) LOUISIANA—Louisiana State Rifle Championship at Lake Charles, Louisiana. Peggy Bumpers, P. O. Box 1426, Lake Charles, Louisiana

4-5 (B) MONTANA—Montana State Small Bore Rifle Tournament at Lewistown, Montana. Frank Simenfy, Care National Bank, Lewistown, Montana (Adv-Ltd)

3-4 (B) TENNESSEE—First Annual East Tennessee Small Bore Rifle at Kingsport. C. A. Sine, Route 4, Jonesboro, Tennessee

4-5 (B) WEST VIRGINIA—12th Annual Mountain State Pistol Tournament at Parkersburg, West Virginia. R. A. Simpson, Fort Borneman Rifle Club, Parkersburg, West Virginia

3-4 (B) MICHIGAN—40th Annual Michigan State .30 Caliber Championship at Camp Grayling, Michigan. Henry J. Van Kampen, 557 Navahoe Avenue, Detroit 14, Michigan

3-4-5 (B) CONNECTICUT—Connecticut Valley Pistol Championship at Rocky Hill, Connecticut. George G. Ledder, P. O. Box 19, Rocky Hill, Connecticut (Adv-Ltd)

10-11 (B) CALIFORNIA—Bay District Rifle Tournament at Richmond, California. Chilton DeWitt, 3701 Lincoln Avenue, Oakland 2, California (Adv-Ltd)

10-11 (B) VERMONT—Vermont State Small Bore Rifle Tournament at Burlington, Vermont. Miss Pauline B. Cadieux, 410 North Street, Burlington, Vermont (Adv)

10-11 (B) NEW JERSEY—11th Annual New Jersey State Pistol Championship at Teaneck, N. J. Frank Svec, Box 42, Leonia, New Jersey (Adv-Ltd)

10-11 (B) NEBRASKA—Nebraska State Rifle Tournament at Grand Island, Nebraska. Harold H. Buis, 1312 North 35th Street, Omaha, 3 Nebraska (Adv)

11 (B) IOWA—Iowa State .30 Caliber Rifle Tournament at Moscow, Iowa. Ruth Maurer, Wilton Junction, Iowa (Adv-Ltd)

17-18 (B) NEVADA—Nevada State Small Bore Championship at Boulder City, Nevada. Mrs. Dorothy D. Cox, Box 453, Boulder City, Nevada (Adv-Ltd)

18 (B) MONTANA—Montana State .30 Caliber Championship at Fort Harrison, Montana. Marion Heller, Lewistown, Montana (Ltd)

17-18 (B) NEW YORK—New York State Pistol Championship at Poughkeepsie, New York. Mrs. Martha W. Strahan, 30 Arnold Blvd., Poughkeepsie, N. Y. (Adv-Ltd)

24-25 (B) TEXAS—20th Annual State Pistol Championship at Austin, Texas. Henry Hankey, 823 Harris Avenue, Austin, Texas (Adv)

Gun Cleaning IS NECESSARY!

A CLEAN gun is safe from rust and corrosion! Protect your firearm by cleaning it regularly! Use a BRITE-BORE Brush made of the finest Phosphor Bronze bristles to remove lead and carbon deposits—then apply a protective coating of gun oil with a BRITE-BORE Bristle Brush. (For shotguns there's an extra fine wool Bore Polisher to add that extra gleam!) For guns of all calibres and guages.

BRITE-BORE GUN CLEANING EQUIPMENT

"Right √ for your gun"

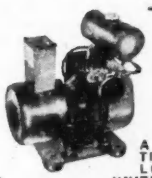
FREE! *The "BRITE-BORE WAY TO CLEAN YOUR FIREARM". Write to the MILL-ROSE CO., 1985 East 59th St., Cleveland 3, Ohio. Mention this magazine.*

Free Fall Catalog

Ready August 4

Showing Hunting Footwear, Clothing, and fifty-two other leather and canvas specialties of our own manufacture for campers and hunters.

L. L. Bean, Inc.
Dept. B
Freeport, Maine



LIGHT YOUR COTTAGE — CABIN — TRAILER — CAMP with a LITTLE KILOWATT portable GENERATOR—400 WATTS, 110 VOLTS D.C. POWERED WITH 1½ H.P. GASOLINE ENGINE. Uses Any 110 Volt Light Bulb.

A POWER SOURCE FOR ELECTRIC DRILLS, SAWS, ETC. LOWEST PRICE IN THE UNITED STATES $114.50 DELIVERED FULLY GUARANTEED. See your dealer or order direct enclosing $10.00 Money Order. Balance C.O.D. Free Folder on Request.

L S T MFG. CO. *Dealers Wanted* 193 Baldwin St., Oshkosh, Wis.

RUANA HOLLOW GROUND HANDCRAFTED **KNIVES**

Latest Standard and DeLuxe Models—$3.75 to $12.75
Send 3¢ Stamp for Illustrated Price List
RUANA KNIFE WORKS — Bonner, Montana

DEWAR BULLET BOX

A necessity for all small bore target shooters. Holds fifty shells plus a full box. Unique feature of box is arrangement of shells to represent target. Made of selected hardwood with brass fittings. Free descriptive folder. Price only $2.00. At your dealer or direct. DEALERS WANTED.

H. C. NIELSEN 630 Congress St. Neenah, Wisconsin

JOHN E. ZuFALL

John E. Zufall, Monroe, Louisiana, says: "I believe in giving plenty of medals. A good medal is a good gamble against an extra registration or two, and that is what pays off. Our club has always given Blackinton medals, and we are well satisfied."

Blackinton's Club Service is the plus value that earns the praise of club secretaries. Newly elected secretaries should send for the new Blackinton trophy catalog.

BLACKINTON

The Oldest Name in Insignia

V. H. BLACKINTON & CO., INC.

Attleboro Falls, Mass.

WHAM-O SPORTSMAN*

$1.00 postpaid. Dealers Write

HITS LIKE A .22 RIFLE—
KILLS RABBITS, SQUIRRELS.
For Hunting, Target, Hunting Posts.

A man's sport! Powerful, silent, accurate. Complete with 40 pellets and extra rubber straps. Send $1.00 today to—
Wham-O Mfg. Co., Box 2H South Pasadena, Calif.

HEAVY DUTY STOCK

*PROFESSIONAL MODEL USED BY MEMBERS OF NAT'L SLINGSHOT ASS'N

DRESS UP THAT OLD 97 OR MODEL 12 WINCHESTER WITH A NEW STOCK AND MAGAZINE TUBE

Stocks are commercial grade, new and unused, appearance is excellent or better, exactly the same as the stocks on the latest standard grade Winchester Repeating Shotguns, they are completely finished, all ready to drop into place (no further fitting necessary), with fitted butt plate, latest style pistol grip, a genuine Winchester product, inletted for sling swivel, for Model 12 and Model 97, 12 gauge only, $6.00 each, two for $11.50
FOR MODEL 12 ONLY, as above except NOT inletted for sling swivel, $8.75. Slightly scratched..... 7.00
FOR MODELS 12 & 97, 12 gauge only, inletted for swivel, new but slightly shopworn as to appearance only.. 5.00
MAGAZINE TUBES. Win. Model 97, Remington Model 10 & 29, takedown or solid frame, new, each..... 3.25
Western #209 Battery Cup Shotgun Primers. Fresh Stock, Non Corrosive and Sure Fire. Fit Winchester, Western, and Federal shells. 10 to 20 gauge inclusive, $2.50 per thousand; 2,000 for $12.00; $25.00 per case of 5,000
NEW EMPTY PRIMED BRASS SHOTGUN SHELLS, 10 GAUGE ONLY, per box of 25 ..... 5.00

ROBERT K. HAELIG (LIFE MEMBER) Dept. R, Bound Brook, New Jersey

No C.O.D.'s Please Send Check or Money Order. All Items except Ammunition and Components Postpaid.

the .22 RUGER pistol

The .22 Ruger Pistol represents the first overall improvement in automatic pistol design since the Browning patent of 1905.

For simplicity, strength and handsomeness it has no equal.

A cylindrical bolt moving in a tubular receiver provides a strong, simple action with unmoving sights. It can be dismantled in five seconds.

The Ruger Pistol weighs 2¼ pounds and measures 9 inches with a 4¾ inch barrel. It fills a man's hand fully and comfortably. The grips are sharply checkered hard rubber; the trigger is broad and grooved. It has a positive safety catch and detachable magazine holding nine .22 caliber long rifle cartridges.

The reader is invited to send for a free leaflet describing the Ruger Pistol in detail.

STURM, RUGER & CO., INC.
SOUTHPORT, CONNECTICUT

EXCLUSIVELY
FOR NRA MEMBERS

TWO insurance coverages both practical and inexpensive are available exclusively to NRA members. One policy protects you against loss or damage to your guns or shooting equipment from practically all causes; the other policy pays all your medical and hospital bills up to $500 if you have any kind of an accident. Broad coverage — nominal cost — prompt payment of claims assured by a fellow NRA member who offers this double protection. Clip and mail the coupon for particulars on either or both of these coverages.

CARPENTER INSURANCE SERVICE
1206—19th Street, N. W. 8-49
Washington 6, D. C.

Yes, I am interested in your **ALL RISK GUN** and **PERSONAL ACCIDENT** Protection. Send particulars.

Name _____
Address _____
City _____ State _____

☐ Check here for details on **CLUB LIABILITY** for your local club.

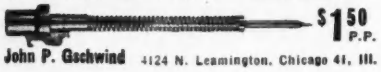
The ECHO-MOUNT—Machined to fit specific rifle models, gives you low scope position in exact center for normal sighting. Quickly detachable to permit use of metallic sights, or safety in transportation . . . replaceable in *Absolute Alignment* immediately. With an ECHO you can use one scope on several rifles and retain its efficiency 100%. Before you buy *any* mount . . . inspect the ECHO (The Mount with 9 IMPORTANT FEATURES) at your dealers, or write

E. C. HERKNER COMPANY, DEPT. A-20 BOISE, IDAHO

HEAVY CANVAS GUN CASE

$2.25 Postpaid

1917 ENFIELD FIRING MECHANISMS



$1.50 P.P.

John P. Gschwind 4124 N. Leamington, Chicago 41, Ill.

24-25 (B) FLORIDA—Florida State Pistol Championship at Clearwater, Florida. C. A. Brown, P. O. Box 253, Tampa, Florida (Adv-Ltd)

25 (B) UTAH—Utah State Pistol Championship at Salt Lake City, Utah. David P. Sugden, #1 North 7th West Street, Salt Lake City, Utah

OCTOBER

1-2 (B) PENNSYLVANIA—Pennsylvania State Pistol Tournament at Harrisburg, Pennsylvania. F. H. Wells, 3800 Hillcrest Road, Harrisburg, Pennsylvania (Adv-Ltd)

1-2 (B) OHIO—Ohio State Team Small Bore Rifle Tournamen. at Mt. Gilead, Ohio. John R. Lang, 3498 Meadow Avenue, Cincinnati 11, Ohio (Adv)

1-2 (B) OKLAHOMA—Oil Capitol Fall Small Bore Rifle Tournament at Tulsa, Oklahoma. Matt Dunham, 1708 South Yorktown, Tulsa, Oklahoma (Adv-Ltd)

7-8-9 (B) VIRGINIA—First Annual Marine Corps School Pistol Tournament at Quantico. Lt. Col. W. F. Prickett, Marine Corps Barracks, Quantico, Virginia

8-9 (B) ARKANSAS—Seventh Annual State Small Bore Rifle Tournament at Little Rock, Arkansas. M. F. Fiske, 108 West 9th, Room 207, Little Rock, Arkansas (Adv)

15-16 (B) ALABAMA—Alabama State Championship Small Bore Rifle Tournament at Mobile, Alabama. H. W. Passinger, 2014 C North Portier Court, Mobile, Alabama (Adv)

15-16 (B) TEXAS—Ada Zilker Robinson Pistol Tournament at Austin, Texas. Sidney C. Mason, 3600 Bonnie Road, Austin, Texas

15-16 (B) CALIFORNIA—Far Western Small Bore Rifle Championship. Henry C. Wright, 1025 Michigan, Fresno, California

29-30 (B) TEXAS—Capitol City Small Bore Tournament at Austin, Texas. Sidney Mason, 3600 Bonnie Road, Austin, Texas

STOLEN GUNS

Mauser pistol, semi-automatic, cal. 7.63 mm, serial number 318998. Condition poor inside, recently reblued outside, modified front and rear sights, shoulder stock slot filled with lead. Stolen from auto in Chicago, Feb. 1949. John F. Dodds, 516 Northwestern Ave., West Lafayette, Ind.

Browning O & U 12 gauge double selective triggers, 26" matted barrel, skeet boring, #6773; Parker Skeet grade 28 gauge, 26" barrels with skeet boring, single trigger, new condition, #237531. Reward. C. C. Rogers, 645 E. Alisal St., Salinas, Calif.

Hi-Standard pistol (White Target Grip) H-D military, 4½" barrel, #227821. E. Frank Heilemann, Center St., Grayslake, Ill.

.30-'06 Enfield Remington. #407295. Ross Allen, P. O. Box 256, Altadena, Calif.

F. N. Mauser bolt action custom made rifle, dark walnut fancy grain Monte Carlo stock, black buttplate and white liner, black grip with white liner and small insert over screw which holds grip cap on, pistol grip and fore-end checkered, studs for quick detachable sling swivels, Redfield ramp front sight, Lyman #48 micrometer rear sight. Caliber stamped on left side of barrel (22-250); Rifle, custom made, single shot lever action with Winchester Hi-Sidewall action, top of locking lugs are engine turned, front sight but no rear iron sight, Lyman-Alaskan 2½ power hunting scope #37793 attached with Redfield Jr. mounts. C. C. Johnson and caliber (22-3000 Lovell) stamped on left side of barrel; one pair Bausch and Lomb 7 X 35 binoculars, Serial # AU-6478 in genuine tan leather case; one Lyman-Alaskan 2½ power hunting scope, Redfield Jr. mounts; one Bausch and Lomb 60 mm. 20 power spotting scope, olive green with aluminum band at frond end, serial # LG-8862. E. W. Bevan, Box 392, Hebron, Ohio.

7.65 mm. Walther, serial # 229377E, in brown leather shoulder holster. Capt. Thomas A. Ahroon, 1406 Westover Avenue, Norfolk, Va.

Following lost during Columbia River flood in spring of 1948: S&W 1947 K-22 Masterpiece, #K 4313, .22 cal. 6" bbl. Pachmayr adapter, in leather Lawrence Holster; Starr Army revolver, cap and ball double action, 6" bbl. One cap nipple split off on side, main spring missing, hand spring missing, front sight missing, pivot screw holding rod to frame had head broken off. Carved on one side of grips J.A.C. and on other side OKLAHOMA; Winchester Carbine Model 94 cal. .30-30, 20" bbl. Charles S. Lewis, 1936 S. E. Alder St., Portland, Oregon.

DOPE BAG

Conducted by Major General Julian S. Hatcher

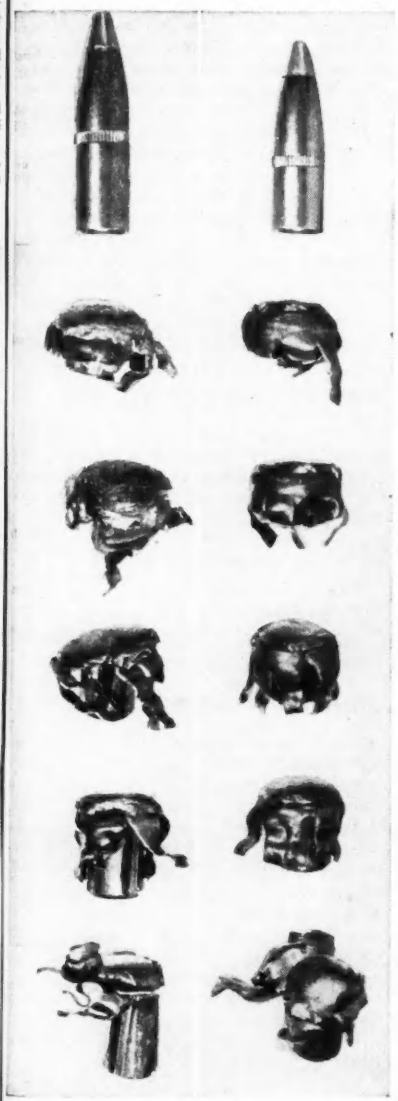
A. H. Barr Edwards Brown, Jr. J. S. Rose M. D. Waite

New Winchester-Western Hunting Bullets • Latest Custom Bullets • Left-Handed Bolt Actions • .240 Cobra Cartridge • Reduced 250-3000 Load • Light .30-'06 Loads • 6.5 x 55 Jap • Miller Kodiak Dreamount • New Products • Trade Dope • Book Reviews

NEW WINCHESTER-WESTERN HUNTING BULLETS

For the last several years we have been watching with interest the work being done by Olin Industries with the latest and best in scientific instrumentation and research methods as applied to ballistic problems.

The new apparatus includes a 360,000 volt X-ray machine, taking radiographs at a millionth of a second of bullets and shot charges passing through gun barrels and through blocks of gelatin and other substances representing the flesh of a game animal. A perfected technique of high-speed photography permits photos of bullets in flight after passing through test materials. These show how much the shape of the point has been changed by passing through the test material before the bullet strikes the backstop used to recover it for further examination.



New 180- (left) and 150-grain Winchester-Western bullets (right) and several of the same bullets recovered from targets (top to bottom) at 50, 100, 200, 300 and 400 yards

On outdoor ranges, sensitive sky screens were set up at long range and connected to electronic counter chronographs to record actual velocities at long ranges instead of computing them as was previously necessary.

For several years the Company has been accumulating data from hunters and all other possible sources on game bullet performance to obtain the best opinion about what was needed for an ideal game-killing bullet. Correlation of this data showed that the present bullets are excellent, but that some improvement was possible so the scientific research facilities were put on the task of getting out the best possible bullet for the American hunter.

The result is the new line of Silvertip and soft-point bullets just announced as we are going to press. A most important advantage is a new ballistic shape for several of the Silvertip series, which makes the velocity hold up better, thus giving higher remaining velocities and consequently increased killing power at longer ranges. This change in shape alone has extended the killing range of the Silvertip in certain calibers such as the .30-'06, .30-40 Krag, .300 Magnum and .270 by as much as 100 yards.

Another highly important feature of the new ammunition is uniformly controlled optimum expansion of the bullets, which open easily on striking flesh even at long ranges and still hold together on the largest animals at short ranges.

An idea of the uniformity of the expansion at various ranges and velocities can be obtained from the comparative picture shown herewith.

The cartridges, which have been redesigned and modified for improved performance, include both Silvertip and soft point in the following calibers: .257 Roberts, .270 Winchester, .30-30 Winchester, .30 Remington, .30-'06, .300 Savage, .32 Winchester Special, .32 Remington, and .375 H&H Magnum. The new .250 Savage, .30-40 Krag and .300 H&H Magnum cartridges are loaded with the Silvertip only, and .35 Remington and .303 Savage with the soft point only. —J.S.H.

LATEST CUSTOM BULLETS

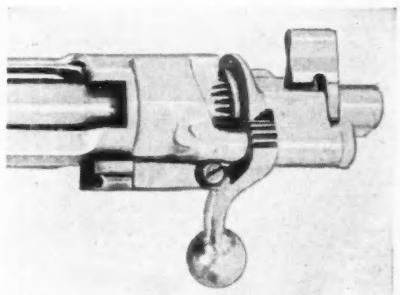
Fred N. Barnes, P. O. Box 46, Golden, Colo., is now making .270 bullets of 100 and 120 grains using drawn copper cups instead of copper tubing. They are very accurate bullets in our .270. When using either 51 grains of No. 4895, lot 27277, with the 120-grain Barnes bullet and Winchester 120 primers, or 52.5 grains of the same powder with 100-grain bullets, the loads gave minute-of-angle accuracy at both 100 and 200 yards. Very practical accuracy has also been had using a heavier load of 54 grains of the same powder with 100-grain Barnes bullet.

Another varmint bullet is the 110-grain spire or pencil point by J. W. Hornady, 324 W. Fourth St., Grand Island, Nebraska. Testing only fifty of these, we obtained superb accuracy for such light .30-caliber bullets with every load tried. Some .30-'06 loads were as light as 47 to 48 grains of No. 4895 and others as heavy as 54 grains of the same powder. With the heavier loads and also with 52.5 grains of powder in the '06, 1½-inch groups at 200 yards were obtained with our Martini test gun. The lighter loads gave equally fine accuracy in a service Springfield.

Similar performance in the Improved '06 rifle was obtained with 150-grain Sierra and the Hornaday 150-grain Spire bullets using 57 grains of No. 4064 powder. All loads were with Winchester 120 primers.—A.H.B.

LEFT-HANDED BOLT ACTIONS

Roy Gradle, 205 W. Islay St., Santa Barbara, Calif., is specializing in a very practical left-hand conversion job on Mauser actions. Unlike most left-hand conversions, the conventional bolt still turns to the right when going to locked position in the receiver, even though it is operated by a bolt handle on the left side of the action. This is accomplished by means of gear teeth milled on the back end of the bolt body which fit corresponding gears on the base of the bolt handle. Thus, when the handle goes down to the left, the bolt still turns to the right and avoids the necessity of cutting metal from the forward part of the receiver as is required for the conventional left-hand conversion job where the bolt itself is made to turn to the left when going into locked position in the wells of the receiver.



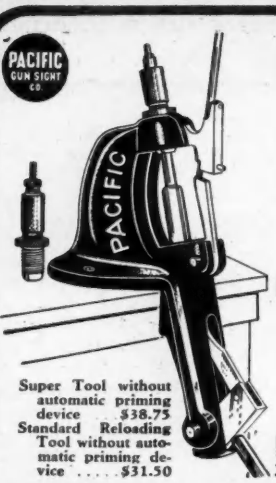
Left-handed Mauser made by Roy Gradle places bolt handle, which turns bolt to right still, on left side of action. No metal is removed from action

The Gradle conversion job, therefore, takes nothing at all away from the strength of the original action. All welding and other changes are centered at the bolt and receiver bridge of the action. We cannot see why Gradle's conversion would not be one of the most practical for the left-hand shooter. Mr. Gradle reports that he already has several satisfied users of the converted Mauser. —A.H.B.

.240 COBRA CARTRIDGE

An interesting wildcat cartridge in .240 caliber has been named the .240 Cobra in

PACIFIC GUN SIGHT CO.



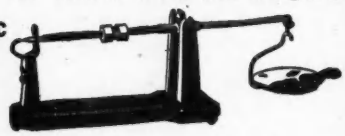
Super Tool without automatic priming device $38.75
Standard Reloading Tool without automatic priming device $31.50

Get a "PACIFIC"
The Proven Reloading Tool

More than 17,000 in use. You must have something good when you have that many satisfied customers. You, too, will be a *"Pacific"* booster as soon as you have loaded a hundred shells.

The **"Pacific" Powder Scale** is made especially for reloaders. Super-accurate—sensitive to one-tenth of a grain.

Pacific Scale



Complete with weights, **$8.50.**

PACIFIC GUN SIGHT CO.
353 Hayes St., San Francisco (2), Calif.

The New HOLLYWOOD RELOADING TOOL

Now in Stock — All Cals. — You Save Trans. from West Coast on All Reloading Tools **37.50**

BULLETS - POWDER - PRIMERS

Sierra Round Nose 224—45, 50, 55 gr. H.V. ..... $ 2.75
Sierra .224 Bullets 45, 50, 55 gr. H.V. Spitzer ... 2.75
Sierra .223 .224 Hornet Bullets 40 45 gr. S.P. ... 2.25
Sierra .30 Spitzer 125 gr. $4.25—150 gr. $4.50—180 gr. ... 4.75
Sisk .224 49 gr. Express $2.75—Speer 257 87 gr. ... 3.75
Speer .257 60 gr. $2.95—100 gr. $3.00—6.5 120 gr. 4.00
Speer .270 100 gr $3.25—130 gr $4.50—7mm 130 gr 4.50
Speer .308 110 gr. $4.25—150 gr. $4.50—180 gr. ... 4.75
Speer 8mm 125 gr. $3.25—170 gr. $4.50—.358 ... 5.75
Barnes .25, 90 gr. 125 gr.—.270, 120, 130, 140, 160 gr. $5.00—7mm 160 gr.—.30, 125, 150, 180 gr. Spitzer $5.00—270 180 gr. 30 cal. 200 gr. ... 5.50
New M&G Bullets 257 60 gr. $4.00—100 gr. $4.40—87 gr. $4.20—117 gr. $4.60—125 gr. $4.80—6.5 100 gr. $4.40—129 gr. $5.00—270 100 gr. $4.40—130 gr. $4.80—150 gr. $5.00—7mm 139 gr., 154 gr. $5.10—308 150 gr. $5.00—180 gr. $5.20—110 gr. $4.40—125 gr. $4.80—.228 70 gr. $4.00 8mm 139 gr. $4.80—150 gr. $5.00—175 gr. $5.20—220 gr. ... 5.60
DuPont Powder 4227, 4198, 3031, 4320, 4064, 4350 $1.90 lb.—#6 pistol, 4759 $1.15 can ... lb. 2.25
Hercules Powder—Bulls Eye $1.60—Unique $1.85—2400 & HiVel #2, can, per pound ... 2.00
Primers 115, 120, 116, 111, 8½, 9½, 6½, 1½, 108 2½ 75¢ per C, per thousand ... 6.75
Cases, 218 Bee $4.75—25 Rem. $7.10—250 Sav. $7.90—257 $7.90—22 Hornet $4.60—219 Zip $7.10—270, 30'06 $8.20—Fired Once 300 Mag. New ... 8.75
Pacific Super Tool $38.75—Universal $47.50, $55.00, 68.50
Pacific Universal Dies $12.50—Tru Line Jr. Dies 9.25
Belding & Mull Tool $19.50—Powder Measure ... 12.50
Ideal #310 Tool $9.50—Tru Line Jr. Tool ... 22.50
Ideal Powder Measure $10.00—Lubricator & Sizer 12.50
Saeco Measure $14.50—Stand $3.25—X Drum ... 4.00
Smiley Case Trimmer $10.50—Potter Furnace ... 16.00
Ideal or B&M Hand Books 60¢—Ideal Sizing Dies 3.00
Wilson Trimmer $12.00—Neck Reamer $5.50—Holder $1.25—Wilson Sizing Die $6.60—Case Gauge ... 4.50
Redding Powder Scale $11.95—Pacific Scale ... 8.50
10X Imperial Non-Slip Coats $15.00—Gloves ... 4.00
Colt Conversion Units 22-45 $40.00—Val. Special 35.00
Redfield #102 $6.50—#70 $9.50—Red. Mounts ... 16.50
Buehler, Echo & Stith Mounts ⅜, ⅞, 1" ... 15.00
White Line Recoil Pads $3.25—Deluxe $3.50—Pad 2.00
Sharpe's Complete Guide to Hand Loading ... 10.00
Bishop Stocks Sporter $8.95—Target—Mann ... 11.50
Fast Action Safe for M-12 Right or Left ... 2.50
Banta Bullet Dies $40.00 Set—Core Seater $4.00—Lead Cutter $5.00—Core Lead 40¢ lb.—$8.75 per 25 lb. Roll—Jackets per M ... 7.50

No checks please, 50¢ packing charge.
Stamp for List — Discount to Dealers.

AURAND'S
229-231 E. 3rd
Lewistown, Pa.
Phone 3406
Open 8 a.m. to 9 p.m.

$37.00 Add 20% Tax

Brand new 6x30 M-3 Army with leather case. Coated optics. Never before offered at this low price. Send check or money order. Glasses guaranteed.

New 7x50 Hood rubber binocular case, with straps for case and glass included. $4.95. 6x30 leather case and strap, $3.95.

HARRY'S SALES
N.E. COR. 9TH & SOUTH ● PHILADELPHIA, PA.

ROMAC DISAPPEARING GUN SLING

For Shotguns and Rifles

With this unique new device a sturdy sling is *always* available for instant use, on your favorite shotgun or rifle.

Complete unit in compact housing of light, stainless steel easily installed within butt stock. Includes top-quality leather sling 40" long, adjustable to your exact requirements.

Special set of front swivels for double-barreled shotguns; otherwise all units exactly the same for all other guns. (Please specify.)

Only $7.00, with money-back guarantee, including full instructions for simple installation. Installed at plant for $2.50 additional, plus postage. Send stock only, where possible.

This is not a "gadget" but a strong, dependable sling that will give you years of pleasing service.

ROMAC CO. HARRIS, NEW YORK

Dealers and gunsmiths inquiries invited. Sold under "Fair Trade" laws.

"QUOTES"

"When I have inserted previous ads in *The Rifleman* it has been necessary to JUMP BACK OUT OF THE WAY when the replies started rolling in—yours is really a remarkably fine advertising medium!" *(Name on request.)*

JAP AMMUNITION

6.5mm (25) Jap 156 gr. Soft Point, box 20.... $4.50
7.7mm (31) Jap 110, 150, 180 gr. SP, box 20 3.50
7.7mm (31) Jap 174 gr. Full Patch, box 20..... 3.00
All other types foreign and domestic ammo.
No C.O.D.'s.

GUNSMITHING

Specializing in conversion of JAPANESE, MAUSER, ENFIELD, SPRINGFIELD RIFLES. Sights, scopes, rebarrelling, bluing. All work guaranteed.

MITCHELL'S GUN SHOP Hanover, N.H.

a contest by Custom Gunsmith Service, 1032 Stagg St., Sun Valley 3, Calif., who are featuring this new cartridge. Based on the Improved version of the .220 Swift case, the cartridge has already been developed to the extent of showing very promising accuracy, flat trajectory and excellent wind-bucking qualities.

The name selection contest ended March 31, 1949, with 459 different names submitted. From the list, the name Cobra was selected by the judges, who were General Hatcher of the NRA, Charles H. Morse of Herkimer, N. Y., and Hosea Sarber, the Alaskan rifleman.

The winner was William Corson, 8983 Hollywood Hills Road, Hollywood 46, Calif. The name Cobra was submitted by ten contestants but the winner was determined by the time and date of receipt of entry. The winner is to receive a free .240 barrel fitting with barrel and action deluxe blued by Custom Gunsmith Service.

Experimental work on the .240 Cobra cartridge began a number of years ago, and one of the spark plugs for its development was the late J. Bushnell Smith, the well-known custom loader, together with a group of shooters on the West Coast, and Vernon Gipson, the North Salem, Indiana, gunsmith. In fact, Gipson had a number of different versions of 6-mm. cartridges based on the shortened '06 case and others. He apparently went to the smaller capacity .220 Swift with case neck expanded along about the time the .240 was made on the West Coast using F. K. Elliot reamers for an Improved Swift cartridge case with the neck expanded to .240 caliber.

We wil report on the performance of the .240 Cobra cartridge at a later date.—A.H.B.

REDUCED LOAD FOR .250-3000

I am trying to make up a reduced load for my .250-3000 Savage with the No. 257388 Ideal bullet, supposed to be 80 or 85 grains gas check. What powder charge of No. 4759 DuPont should I use to develop around 1800 feet-per-second muzzle velocity?—WESLEY McCLURE, Tampa, Florida.

Answer: Thirteen grains of DuPont No. 4759 should give you around 1800 feet per second with your 85-grain gas-check bullet. —J.S.H.

LIGHT .30-'06 LOADS

I have been reloading .30-'06 cartridges with 10 to 12 grains of Hercules No. 2400 powder and using a Pope-type 174-grain lead bullet.

As I understand it, the bullet was designed to be used with 14 grains of the old No. 80 powder. Inasmuch as this powder is no longer available, I have tried using 10 to 12 grains of No. 2400 in an effort to duplicate the performance of 14 grains of No. 80 powder. To date, my success has been nil, with very inaccurate groupings.

Can you suggest a load that will duplicate the very accurate low-pressure load formerly available by using No. 80 powder?—WM. E. BARROWS, Los Angeles, California.

Answer: Chances are IMR No. 4759, which replaced No. 80 powder, would be your best bet and would burn more uniformly in light charges than No. 2400. Using between 16 and 20 grains of No. 2400 with gas-check bullets frequently you can get good accuracy

but the charge is too much powder for the plain-base bullet. You should try increasing the No. 2400 load gradually and go up to about 14 grains. If you do it in 1- or ½-grain steps, you can watch the trend in group sizes and see whether they close in or open up more than with the lighter loads. If you use No. 4759, start with 11 to 12 grains and work up by the 1-grain steps. That is the only way to develop an accurate load with lead bullets.

You might also try Hercules Unique, which usually works quite well for low-velocity loads. For example, with a 150-grain bullet, 11.4 grains gives 1500 foot-seconds velocity; with a 180-grain bullet, 14.6 grains gives 1600 foot-seconds. For lead bullet plain-base loads with the Pope-type bullet I would suggest you try from 9 to 12 grains of this powder.—A.H.B.

6.5x55 JAP

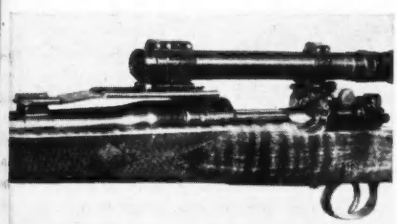
Is the imported Norma ammunition marked 6.5x55 Jap useable in the standard .25 Arisaka service rifle? I have an empty Jap case which seems to be considerably shorter than 55 mm. Also if this cartridge will work, is it suitable for reloading and what type primer does it have? I assume that being of European manufacture, standard American primers will not work.—ROBERT H. CREE, Dudley, Penna.

Answer: A number of gunsmiths have recently chambered 6.5 Jap rifles for the 6.5x55 cartridge, which is much larger than the standard 6.5-mm. Jap cartridge and will not work in the Arisaka rifle unless it has been rechambered.

As you surmise, these cartridges have Berdan primers, which can be obtained either from Ashton & Co., 1511 N. Gardner, Hollywood 28, Calif., or Hollywood Gun Shop, 6032 Hollywood Blvd., Hollywood 28, Calif.—J.S.H.

MILLER KODIAK DREAMOUNT

Occasionally we see and try a hunting scope mount like the new Kodiak Dreamount by Miller's Gun Shop, Kingwood Park, Poughkeepsie, N. Y., which has some unusual features. According to the designer, John M. Miller, who has a patent pending covering the mount, it is called the Dreamount because, to him at least, it satisfies the requirements for the mount he has dreamed about for years. Before designing the mount Miller compiled a list of twenty-five scope mount requirements to be kept in mind in designing the mount.



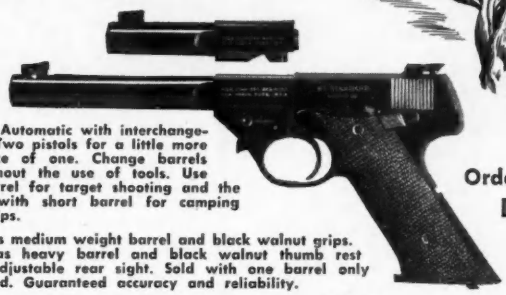
Miller's Kodiak Dreamount does not require drilling holes in receiver and it can be detached and replaced quickly with no change in zero

Some of the twenty-five requirements were that no holes must be drilled or tapped in the metal in installing the mount, that the scope must be easily detached or replaced on the

HI-STANDARD

NOW! ONE GUN Two Barrels

.22 Cal. Long Rifle



HAMMERLESS Automatic with interchangeable barrels. Two pistols for a little more than the price of one. Change barrels instantly, without the use of tools. Use with long barrel for target shooting and the same pistol with short barrel for camping and fishing trips.

Model G-D has medium weight barrel and black walnut grips. Model G-E has heavy barrel and black walnut thumb rest grips. New adjustable rear sight. Sold with one barrel only unless specified. Guaranteed accuracy and reliability.

Also a low priced, light weight .22 Automatic in the model G-B.

Order at Your DEALER'S Ready Now!

HIGH STANDARD MFG. CORP. 1811 DIXWELL AVE., NEW HAVEN, CONN.

HOPPE'S No. 9 is a thorough GUN CLEANER

Use it to remove primer, powder, lead and metal fouling, or any kind of gun bore scum. It prevents rust too. Your dealer sells Hoppe's No. 9 or send us 10c for sample. Helpful "Gun Cleaning Guide" FREE upon request to

FRANK A. HOPPE, INC.
2221 No. 8th Street, Phila. 33, Pa.

RELOADER'S Supplies
DISTRIBUTOR FOR HORNADY BULLETS

- POWDER—#4895 at 75c. #4759 at $1.00 lb., or 110 lb. keg $40.00. DuPont & Hercules rifle $1.80. Pistol, shotgun $2.20. 10% discount on 10 lb. powder with 1000 primers at $6.50. Shot $8.00 25 lb. bag.
- BULLETS—M.G.S., Sisk, Hand Made $2.25 up. Watkyns-Morse $3.35.
- BANTA Bullet Dies—For Accurate 22 Bullets For Rent. Bullet cups $6.00—M.V. $6.50—Wire $8.75 per 25 lb.
- Pacific supertool complete $38.75—standard $31.50. Dies $12.50 per set.
- GAS CHECKS—$1.50 M. Custom made.

B&M & Saeco Powder Measures $12.50—Redding Scales $11.95—Handbooks, Lyman 50¢, B&M 60¢—Lyman, Wilson, B&M Tools.
● SPECIAL—20 lb. Keg 4895, $10.00.

B. E. HODGDON ● MERRIAM, KANSAS

Rex RAMPS

$2.

Graceful lines—hand matted. Furnished with screw. ¼-5/16-⅜-7/16-½-9/16 heights, white or blue.
Marble #57 Gold, Ivory $1.25. Sheard Gold...$1.75
Dockendorff crosswire or bead 5.75
Redfield #70 receiver sights 9.50
Redfield #102 receiver sights 6.50

Rex HARD ACTIONS DRILLS
To drill action without annealing. #31-28, ea. $1.00

Rex ENGINE TURNING TOOLS

Screw fed abrasive tool that simplifies engine turning. With 3 tips and instructions..... 2.50
Tips 3 for $.25—Dozen ..... .60

ENFIELD SPEED ACTION KIT $5.00
New; Simplified: just install parts for short fall, fast cocking, slick trigger. Send sear, cocking piece, trigger with order.

ENFIELD DELUXE $23.50
We cut & crown barrel, mount ramp sight. Precision grind receiver, straighten trigger guard. Polish and blue to high lustre.

MAUSER DELUXE $38.50
New REX 6 groove barrel installed, ramp mounted, deluxe blued. Cal. 257, 250 Sav. 270, 300 sav. 30-06. Write for list. Satisfaction guaranteed.

C. R. PEDERSEN & SON Ludington Michigan

LOADING SUPPLIES
Bullets—Powder—Primers—Tools—Sierra SpitZer H.V. .224—45, 50, 55, $2.75; Sierra Round Nose H.V. .224—45, 50, 55, $2.75; Sierra Hornet .224 S.P.—40, 45, $2.25; Sierra 30 Caliber, 125 gr. $4.25, 150 gr., $4.50, 180 gr. $4.75; Sierra 25 Caliber, 87 gr., $3.75, 100 gr. $3.85, 117 gr. $4.00; CUSTOM LOADING—ALL CHARGES WEIGHT. in the following Calibers 219 Wasp, 22 Varminter, 22 Hornet, 218 Bee, 257, 270, 30-06, 8 m/m Sierra Bullets POSTPAID in lots of 200 or more.

WAS-DEN SPORTING GOODS
2121 MAIN ST. ● NORTHAMPTON, PENNA.

AMAZING NEW LOW PRICED ELECTRIC SPRAYER MAKES PAINTING EASY!

NO BRUSH! NO BACKACHE!

TRY IT 10 DAYS FREE!

INDOORS

Get professional results painting furniture, metal cans, partitions, concrete, brickwork, rough woods, boats, wagons, screens, cabinets, venetian blinds, walls, ceilings, floors, autos, metal equipment, etc., with the famous VIBRO ELECTRIC SPRAYER.

OUTDOORS

SAVE MONEY, WORK AND TIME

VIBRO-SPRAYER quickly, evenly sprays glossy enamels, lacquers, insecticides, etc. Weighs only 2½ lbs. Replaceable glass Mason jar holds 25 oz. Complete—no extras to buy. Fingertip control. AC-110 volts.

AUTOS

SEND NO MONEY JUST MAIL COUPON

Satisfaction guaranteed—or return it within 10 days for full purchase price refund. Only $12.95 C.O.D. plus delivery, or send full payment now and we pay delivery. Unconditionally guaranteed for 90 days. Order NOW!

GARDENS

FOSTER PRODUCTS, INC., Dept. SG-158
179 Wooster St., New York 12, N. Y.

Send VIBRO-SPRAYER C.O.D. for $12.95 plus delivery. ☐ $12.95 enclosed, send prepaid.

Name .....
Address .....
City ..... Zone .... State .....
Money back in 10 days if not satisfactory.

NRA ITEMS

LIFE MEMBER BUTTON

10-Kt gold button. Actual size. Price $3.50, including federal tax.
Also Life Member felt brassard 50¢. Send $4.00 for both.

ANNUAL MEMBER BUTTON

New, gold-filled lapel button. Price includes Federal Tax. $1.50.
Also annual member felt brassard, 50¢ — Send $2.00 for both.

TRIGGER TEST WEIGHT

New precision made blued steel official test weight. Tests rifle or pistol triggers quickly and accurately. 2-piece handle with ½, 1 and 2 pound slotted weights. Price $6.50.

UTILITY SCORE PLUG

All-purpose plug gauge with flanges for scoring .22, .32, .38 and .45 shot holes. The ideal gauge. Price $1.00. Also spring type .22 gauge. Price $1.50.

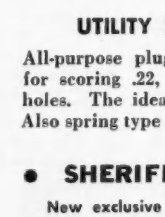
• SHERIFF BOOKENDS

New exclusive design (2-gun sheriff figure) sculptured by Jack Lambers. Per pair $5.00.

• SHOOTERS' ASH TRAYS

Jack Lambert's colorful plastic designs with removable glass insert. Specify "2-gun Sheriff" or "Rifleman" figure. Each $3.00.

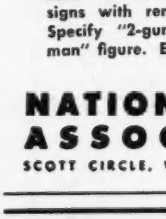
NATIONAL RIFLE ASSOCIATION
SCOTT CIRCLE, WASHINGTON 6, D. C.



PEEP SIGHTS

for KRAG RIFLES — $2.00. For Enfield $2.00; Mauser $4.50; Springfield $4.50; Jap $4.50. Ramp Front Sights, complete with blade, for Krag, Springfield, Enfield and Mauser Rifles, $1.50. Spring Adjustable Barrel Bands for Krag, Springfield, Enfield, Mauser and other rifles, 75¢. Krag Barrel Receiver Fillets, 65¢, for Springfield, 65¢. Springfield Sporter Butt Plates, 70¢. Grip Caps 40¢. Nut and 1½" or 1" Sling Link, 50¢ Screw and 1½" or 1" Sling Link for toe of stock, 50¢. Canvas Gun Cases, postpaid $2.25. Satisfaction or money refunded.

LEROY RICE 316 Masonic Temple, Elyria, Ohio



HOME BURGLAR ALARM 4.95

New anyone can safeguard his home and valuables with this modern and efficient burglar alarm system. Simple to set up or move anywhere, no installation necessary. For the home, apartment, garage, store, business, and even your car. Size 3" x 9". Ready to use with self contained batteries, in ivory, red, green, and black. 10-day refund trial. (Life Member). Pat Pend.

HOME ALARM Box 237 Brewster, N. Y.

B & M offers the greatest advance in reloading tools. Makes for more accurate shooting. Easy to operate. Safe to use. 25 years of successful production behind each piece of equipment.

B & M MODEL 28 RELOADING TOOL $19.50
Equipped with bullet seater attachment

VISIBLE POWDER MEASURE $12.50
Accurate, quick, uniform and safe

B & M HAND BOOK
Belding & Mull HAND BOOK
Tells you how to reload in easy to follow instructions. Shows how to save 50 to 85% of your shooting costs. Prepaid..... 60c

SEND FOR FREE FOLDER

BELDING and MULL
9 N. FRONT STREET PHILIPSBURG, PA.

Marksman Air Pistol, looks like U. S. Army Automatic .45 Special	$4.95
New Canvas Roll Carry-All for sportsmen and general use. Gov. surplus. $12.50 value	$2.25
Binocular Cases, all leather, 6 x 30, $5.00; 7 x 50	$7.50
A.G.M. Kampkook gasoline 2 burner stove. Reg. $12.50—Special	$8.95
TELESCOPES, U. S. Navy, 16 power, wood cabinet, length 31 in., focusing eyepiece, 2¾ in. objective lens—Plain Coated	$29.50 $35.00

PUBLIC SPORTS SHOPS
11 South 16th St., Phila. 2, Pa. (No COD's)

Patent Pending

HULME
AUTOMATIC
CASE FEEDER
for STAR RELOADING MACHINES — both models. Handles 38 & 45 cal. cases. Increased production with ease of operation. Installed by drilling one hole. Jig furnished. $22.50. Order direct or from dealer. Mention whether for single cal. or combination machine.

J. A. HULME FIREARM SERVICE
140 Miriam Street • Daly City 25, California

NEW EZE-SCORER: IN .22 - .38 - .45
(OFFICIAL N.R.A. GAUGES)

At last a new and patented scorer for both wad cutter and ball cartridges. Nothing else like it. Really shows whether the shot breaks or not. Stops protests. Speeds accurate scoring. 1¼" built in magnifier saves eye strain. All flanges tested to ten-thousandths. You'll want one eventually! Why not today? Retail $2.00 each at your GUN STORE or write

RIG PRODUCTS CO. • Oregon 3, Ill.

RUSTEPRUFE...
How To Buy A GUN CLEANER
Go to a reliable store and ask for a brand you can trust, and if you want a bonus, a cleaner and Rust Preventive in one—then its RUSTEPRUFE. Send for free pamphlet on gun care.

RUSTEPRUFE LABORATORIES
SPARTA ••• WISCONSIN

rifle in a second or two while maintaining a constant zero. Another requirement was that means must be provided for placing the scope low on the receiver, without interfering with a sight on the receiver bridge for use at the instant the scope is removed from the rifle.

We have tried one of the Miller mounts and it meets the requirements he said it must have, including positive return to zero. During the test we first fired a group for zero with the scope mounted. Never was a group enlarged by removing and replacing the scope between shots.

In operation the Miller Kodiak Dreamount goes on and off the rifle in somewhat the same manner as the practical and dependable Andy Sorensen springboard mount. A heavy spring enchored to a barrel band lug holds the scope and mount firmly on the receiver bridge, where the legs of the rear V-block contact the receiver. Adjustments are made by means of Allen set-screws located in the base or legs of the V-block. With adjustment in the mount, scopes without internal adjustments can be used.

In the Miller Dreamount we put a new 2½X scope made by the Palos Optical Co., Palos Heights, Ill. The scope does not contain internal adjustments. Optically very good, it compares favorably with other scopes on the market.

The mount was designed for use on most popular bolt-action rifles, fitting on the M98 Mauser, M17 Enfield and the M1903 Springfield, providing the barrels have dovetail slotted bands. The mount can also be used on other guns, such as the model 14 and 141 Remington slide actions, and the Savage Model 99.

Our tests convinced us that the Miller mount has many of the desirable features necessary for the ideal hunting scope mount. —A.H.B.

GOOD CAST BULLET LOAD

Excellent results have been obtained with my 26½ grain HiVel No. 2 load in .30-'06 caliber using a Hensley & Gibbs No. 20 bullet cast of linotype metal and sized to .314 inch. First, I shot five consecutive targets of five shots each with a two-inch, or slightly smaller, dispersion. Then I had one of our club members who is a real belly shooter try it. He shot two groups of one and one-quarter and one and three-quarter inches, respectively, including one shot he called high. The gun is an issue Enfield remodeled. —THOMAS H. MORGAN, JR., Arlington, Mass.

GO-WAD SIZER AND LUBRICATOR

A new, rugged pistol bullet sizer and lubricator has been developed by Frederick J. Gomes and L. E. Wadman. Besides being quite strong and durable, several other nice features are incorporated in the tool. Most important perhaps is the system used for applying lubricant to the lubricating grooves of the bullet. A valve mechanism is built into the tool, which is opened at the proper time as the operating lever is lowered, pushing the bullet into the sizing die. Just as the bullet lubricating grooves are opposite the lubricant vents in the die, the valve opens automatically, permitting grease to fill the grooves. When the handle is raised, the valve is closed again. It is possible to size and lubricate bullets with this sizer and lubricator without getting the faintest trace of lubricant on the bullet, except in the

grooves where it belongs. That includes the base of the bullets as well.

Suitable dies are even made up to size and lubricate .44-caliber gas-check Thompson bullets. The tool, in addition to doing a fine job, is very fast and convenient. The bullets are merely fed into the top of the die and for each stroke of the operating handle one is sized, being forced out the bottom of the die by the next bullet. The price of the tool, complete in one caliber, from L. E. Wadman, 4 Morning Sun Ave., Mill Valley, Calif., is $35.00. Dies and nose punches are available for many of the handgun bullets. They list at $3 for each additional caliber.—A.H.B.

GRAPHITE AS RUST INHIBITOR

Wiping the grease out of a rifle before shooting and cleaning it afterwards is somewhat of a chore. Also, you do not always know whether or not you will shoot the gun at all, but have to keep it ready and degrease it even when the gun has not been fired.

My Hornet and .218 Bee are ready to shoot at any time. The first shot is consistent with the others. The barrels are highly polished inside, and I do not clean the bore. When I am through shooting, I shoot one cartridge with the same primer (noncorrosive) which I have been using (if different primer, shoot two or three), but with about two-thirds or less powder charge and the rest of the space filled with Ipco graphite wads. The grease and graphite are blown into the breech under pressure and on up the barrel.

I do not advocate this for storing a gun for six months at a time in a wet climate (though it might work), but if the gun is shot occasionally it should be satisfactory. I have been using this method for nearly a year with excellent results.—NEWELL CHARDE, Los Angeles, California.

Answer: Thanks for your suggestion on how to keep a rifle barrel from rusting, even without cleaning. While you find your method satisfactory, I would expect the first bullet to be fired through the greased barrel to be erratic. It is in a lot of rifles at least. I personally still prefer to wipe the powder fouling out of a high-powered rifle and frequently the metal fouling as well, using a bronze brush and powder solvent.—A.H.B.

INVENTION OF THE CARBINE

The other day, in an argument about the various types of rifles, the question arose as to who invented the first carbine.

I have spent many hours of research without getting any satisfaction. The only reference I found was that in 1831 John Hall patented a breech-loading carbine.

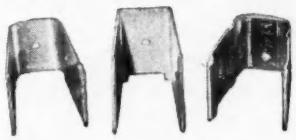
There are several other references to Sharps, Spencer and Terry carbines used during the Civil War but all of them were vague and gave nothing specific.

I will greatly appreciate any information you may be able to furnish.—FRANCIS H. GENDALL, West Reading, Penna.

Answer: There is nothing in the literature to show that anyone ever made a specific invention of the short type of gun known as the carbine.

When firearms were first introduced they were of various lengths, depending upon the circumstances of their use. Barrel lengths

BULLET POINT PROTECTOR



Shoot perfect bullets for accuracy and penetration. Recoil will do no damage to the bullets in the magazine of your rifle if you install a Bullet Point Protector. "A miss is a miss by an inch or a mile."

FOR FOLLOWING RIFLES AND CALIBERS: SPRINGFIELD, 30-06, .270, 8M.M., 7M.M., 6.5M.M., 25-06, .257, and Magnums or Wildcats based on '06 case.

ENFIELD, Same calibers as Springfield. For 5 shot magazines and 30S Remington, grind off bottom to fit your particular magazine. We will also send with each Enfield Protector, instructions on how to eliminate feeding troubles from receiver to chamber.

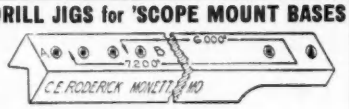
WINCHESTER, M 70 & 54, calibers 30-06, .270, and 7M.M.

MAUSER. Adjustable to any caliber. Must be soldered to sides of magazine for permanent installation. (Price installed $3.00.) All Protectors easily installed—guaranteed—last a lifetime. Made of stainless steel. Discounts to Dealers and Gunsmiths.

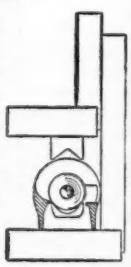
Price Postpaid $1.50

FLOYD F. HELD CULDESAC, IDAHO

DRILL JIGS for 'SCOPE MOUNT BASES



HARDENED BUSHINGS . . . PRECISION JOB EVEN WITH A HAND DRILL . . .
Fixed base spacings in Target Mount Base Jig (ill.) may be varied by moving jig & realign as illustrated. Bushings A & B fit Win. 2-position front bases. Weaver Top Mount Base Jig aligned for each base. Both fit round or octagon barrels and receivers. Target Base Jig $9.00, post. 35¢ Weaver Base Jig $3.50, post. 15¢



See Pete Brown in July "Dope Bag"
Claude E. Roderick
Monett, Missouri

SHEATH

THE POLARIZED RUST PREVENTIVE FOR GUNS, TOOLS, TACKLE
At your dealers 50c & $1.00
Brownell Industries, Inc., Montezuma, Iowa

Address correspondence and orders to A. B. Harris Company, 574 Monroe St., Gary, Indiana

A One-Inch Display "Ad"

You can put this space to work for you regularly, at a very reasonable cost — only $28.00 per month for 12 consecutive insertions. Rates are slightly higher on every-other-month schedule or for single insertions. Circulation of **THE AMERICAN RIFLEMAN** is now over 315,000 copies monthly—and increasing steadily. We are producing splendid results for dozens of advertisers who use this size space right along. Send us "copy" instructions now, for the next issue.

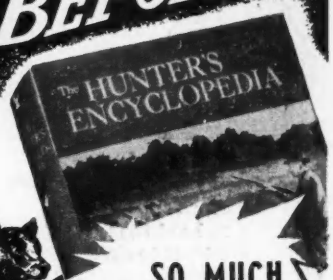
ACCURACY FOR SALE

- .300 or .375 Magnum on your Enfield or Mauser action, from $100.
- Military conversions, from $45.
- Guaranteed accuracy rebarreling in all standard calibers.

All work by journeymen gunsmiths.

A. BENNETT, Gunsmith
2479 Vista Drive Upland, California

NEVER BEFORE...



. . . SO MUCH INFORMATION IN ONE GREAT BOOK!

BIG GAME

SMALL GAME

RIFLES

SHOT-GUNS

HAND-GUNS

AMMU-NITION

Special Notice to Shooters

The Hunter's Encyclopedia is the only book containing a simplified trajectory chart for all rifle calibers and loads, and average patterns for all shotgun gauges and borings.

RAYMOND R. CAMP, Editor

Mr. Camp, Rod and Gun Editor *New York Times*, edited this indispensable all-inclusive volume with the assistance of numerous other famous outdoor authorities collaborating. *Over fifty organizations and hundreds of authorities contributed special experience and expert knowledge*

1,000 ILLUSTRATIONS

Special photographs on breeding and training dogs, original full-color paintings, *illustrations of every known type of hunting gun and how and when to use each. Many extra features on the out-of-doors too numerous to mention.*

ANSWERS ALL QUESTIONS

Regardless of the game you hunt, whether it be large or small, or whether it be with rifle, shotgun, handgun, falcon or bow and arrow, The Hunter's Encyclopedia can joyfully add to your skill with facts and advice It gives you the habitat, characteristics, breeding, feeding habits and range of every bird and animal in North America

5 Day Money Back Guarantee!

STACKPOLE & HECK, INC.
Telegraph Press Bldg., Harrisburg, Pa.

Enclosed please find ☐ Check ☐ Money Order or send ☐ C.O.D. ☐ copies of The HUNTER'S ENCYCLOPEDIA at $17.50 each.

Name .....
Address .....
City .....

☐ Please send Free Catalog ARS-9

Meet the **"RANGER 60"**

a Prismatic Spotting 'Scope with CHAMPIONSHIP SPECIFICATIONS—

Priced at $82.50

Here's the story in a nutshell:

- ★ 60 mm objective lens
- ★ Choice of 12, 20, or 30 power eyepieces
- ★ 104 feet field at 1000 yards
- ★ 30 feet minimum focus
- ★ 33 ounce weight
- ★ Fluoride coated lenses, more brilliant image

Made by the Tinsley Laboratories, the West's largest makers of observatory telescopes, all lenses are "perfection-ground" to eliminate aberrations of any kind. The Ranger is lightweight, yet rugged—is easily and quickly focused. Truly, the RANGER 60 is a worthy big brother to the Saturn SCOUT, acclaimed by shooters everywhere as the finest in its field.

Tinsley laboratories

COMPARE PERFORMANCE, COMPARE QUALITY, COMPARE PRICE...YOU'LL OWN THE RANGER 60!

Write for free folder giving performance specifications and more detailed information.

Tinsley Laboratories • 2524 Grove St • Berkeley, Calif.

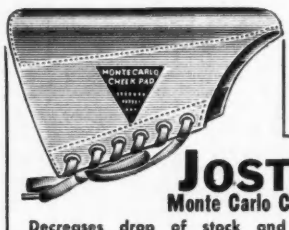
BORE GAUGES

22 Caliber 30 Caliber

These bore gauges are hardened ground—lapped and held to .0001 limit (one-tenth of a thousand). Gauges come ten to a set nicely cased. $12.00 per set—either caliber. Sold single at $1.50 each.
Sizes on 22 Caliber are: .214—.215—.216—.2165—.217—.2175—.218—.2185—.219—.220
30 Caliber sizes: .299 — .2995 — .300 — .3005—.301—.3015—.302—.3025—.303—.3035
Special sizes other than above $4.00 each.

WRITE FOR CATALOG

H & M TOOL CO. 250 E. Nine Mile Road Ferndale 20, Michigan



JOSTAM
Monte Carlo Cheek Pad

Decreases drop of stock and protects cheek from recoil. Jostam pads are sold by leading jobbers and dealers everywhere.

JOSTAM MANUFACTURING CO.
Peotone • Illinois

Custom Gunsmithing by H. G. BAUCHER

Modernize your Rifle *with a*

DRIGGERS *CUSTOM MADE* **STOCK**

Send in your rifle for perfect fitting.
Write for Free Circular.

I am now equipped to give the finest in CUSTOM MADE stocks. All stocks hand fitted to your individual actions. $22.50 up
Beautifully hand checkered.
H. DEAN DRIGGERS *Citizens Bank Bldg.* **LIBERTY, MO.**

"PEEL" "INSTALL - IT - YOURSELF" Accessories

Satisfaction or money refunded. No drilling or tapping. (Except Universal)
Illustrated instructions furnished on request.

SPRINGFIELD PEEP SIGHT—Fits 1903 Models except A3 ..... $4.50
PEEP SIGHT FOR ENFIELDS (Illustrated) having recess in top of receiver under spring (Most Winchesters, Eddystons & British) 3.50
SPRINGFIELD OPEN SIGHT—Fits original sight base 2.50
UNIVERSAL PEEP SIGHT—Similar to Enfield but without special Enfield Nolips. Fits, BY DRILLING & TAPPING: ENFIELDS without recess, WINCHESTERS 94 & 86, MARLIN side ejection models and many 22's, foreigners and shotguns 3.00
EXTRA DISCS for above—1/16", 3/32" or 1/8" aperture ..... each .50
OUTSIDE FLEXIBLE BARREL BAND 1.00

W. P. SPOFFORD • 720 Ogden Ave., Swarthmore, Pa.

ranged all the way from a few inches in the case of the pistol to several feet in the case of the longest rifles, and there were guns of every length between these two extremes.

Naturally, mounted men found it more convenient to carry guns with shorter barrels and during the 16th Century the term "carbine" came into use to designate the shorter weapons.

Gardner, in his book *Five Centuries of Gunsmiths, Swordsmiths and Armourers*, gives the following entry from Evelyn's Diary for 1646:

"We came this evening to Brescia—Here I purchased of Old Lazarino Cominazzo my fine carbine, which cost me 9 Pistoles. This city being famous for these firearms and that workman with Jo Bap Franco, the best esteemed."

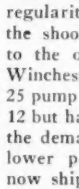
You will see that the term *carbine* originated several hundred years before John Hall was born.—J.S.H.

POTTER SIMPLEX RELOADER

Essentially the Potter Simplex is the durable but simple Potter Gem reloading tool with some additions, especially a powder measure attached to the tool. Actually with it all operations for reloading a cartridge, except bullet seating, can be done at one time. Sizing, decapping, repriming and inserting the powder charge can be one continuous operation, but we prefer to split up the job by sizing, decapping and priming at one time, and then inserting the powder charge and seating the bullet in the second and final operation.

The powder measure is detachable and it can be supplied with different size cylinders either for small powder charges used in pistols, small rifle cartridges and intermediate sizes from about twenty grains, and then the third or larger size.

We have been using one of these tools regularly for reloading cartridges for several of our bench-rest guns, and we find the entire tool, including powder measure, not only practical but very dependable. Complete for one caliber with visible powder measure, the Simplex tool lists at $45. Dies are made to neck size rifle cartridges only but they naturally full-length resize pistol sizes. This tool uses the same dies as are used in the Duplex and combination Duplex, including the special bullet puller made for Potter tools.—A.H.B.



NEW PRODUCTS

New shotguns are hitting the market with regularity this summer, apparently to catch the shooter's attention several months prior to the opening of the fall hunting season. Winchester has announced that the Model 25 pump gun is similar in design to the Model 12 but has a few things left off so it will meet the demands of the shooter seeking a gun of lower price. Browning Arms Company is now shipping their "Superposed" shotgun in 12 and 20 gauge. It is a double with one barrel mounted above the other. Using a 12 gauge, one barrel modified and the other full choke, at trap, and a 20 gauge with both barrels skeet-choke at skeet, we find the guns handle beautifully and show excellent workmanship, inside and out. Savage Arms Corporation is selling the Model 820, a new slide-action shotgun at $53.90, as well as the new semiautomatic Model 755. The semiauto is available in both standard and lightweight

1X scope ready for production by W. R. Weaver Co., El Paso, Texas, is an improved version of the 1X scope put out by that Company before the war for use on shotguns and rifles. Added to the K line as the K1, the new scope has a wide field of view, namely 96 feet at 100 yards. Optically it looks good. A lot if shooters think of a 1X scope as strictly a shotgun affair but there should be a place for it on rifles also—particularly for those individuals who do not care for magnification and want a wide field of view. It will give sighting precision with the advantages of a scope and it should be an ideal sighting instrument on a big-game rifle in bushy country.

☆ ☆ ☆

Plinking target called the Swingeroo is hinged to swing horizontally from side to side as it is hit, making interesting shooting. The target is a piece of steel about two inches square, painted white, on two pointed prongs about six inches long which can be forced into the ground or used to attach the target to a post. The hinge and target arm are adequately protected by armor. There are two models, one for rifles and pistols, and the "P" model for pellet rifles and pistols.

We put the first model midway up on a fifteen foot embankment and shot at it from 75 yards. When the target was hit it was possible to see the white target swing to the opposite side. It has spectator appeal and is a lot of fun for the shooter.

The Swingeroo targets, priced at $3.50, are made by the Kessler Manufacturing Co., Inc., Silver Creek, New York.

* * *

Pocket tension gauge designed especially to test the trigger pull of all types of small arms has recently been developed by A. Schrader's Son Division of Scovill Manufacturing Company, Inc., 470 Vanderbilt Ave., Brooklyn 17, N. Y. This new gauge, about the size of a fountain pen, is handy and easy to use. The indicating bar shows ounces of pull required to trip the hammer when the gauge is hooked on the trigger and tension applied. The manufacturer claims the trigger pull gauge can also be used as a small utility scale of 80-ounce capacity. Retail price is $4.25.

☆ ☆ ☆

Scope sun shades to fit any make of target scope are on sale by S. A. Oster, Llanerch Gun Shop, 2800 Township Line, Llanerch, Pennsylvania. The shades are threaded to take the threads on the inside of the tube at the objective end of the scope. They are 2¼-inches long, are nicely blued, and retail at $2.85.

☆ ☆ ☆

Cartridge case by George L. Jensen, 4100 W. 49th Ave., Denver 12, Colorado, is a handmade heavy leather pouch of approximately the same size and shape as a 20-round carton for the .30-'06 cartridge. It has leather partitions on the inside similar to the cardboard partitions in the standard ammunition carton. It has belt loops on the back and a 'lift the dot' fastener on the front. Retailing for $5.00, it will hold 20 rounds of almost any high-power rifle cartridge, and is a far handier and more practical method of carrying cartridges on the belt than the old-fashioned loop cartridge belt.

AND NOW—TRIPLE ASSURANCE of QUALITY!

YOU'RE GETTING THE *BEST BY TEST*
WHEN YOU ASK FOR BLU-BLAK Gun Finishing Service

Never before in gun history has it been possible for the gun owner to obtain the assurance of highest quality Gun Finishing offered to him today. To show their wholehearted approval of the **BLU-BLAK** Gun Finishing Service and to express their recognition of this superior method the *National Blu-Blak Association*, the *American Gunsmiths Guild* and the *National Sportsmen's Research Institute* have authorized **BLU-BLAK** shops to attach to **BLU-BLAK-SUPERBA** finished guns the three tags shown above.

This triple approval is your guarantee that your gun has been given the finest Finish America knows today. Ask your gunsmith to attach the three tags to your guns and remember that only **BLU-BLAK** shops are authorized to give you this triple assurance of quality.

GUN SHOP OWNERS: America's Supreme Gun Finishing Service is available to you, IF the franchise for your community still is open. It can be the finest asset in your business . . . as the most successful shops in the Land can testify.

SEND $1.00 TODAY for the BLU-BLAK Manual. YOU OWE IT TO YOURSELF TO ACT NOW. Be ready to share in the beautiful business that is coming to all aggressively conducted BLU-BLAK shops.

H. TOM COLLORD, Pres.

PROTECTIVE COATINGS, INC.

Box 3985-AR **Detroit 27, Mich.**

GUNS! AMMUNITION!

● *FRESH IMPORT* ●

HUNTING AMMUNITION—6.5 Mann; 6.5 Dutch Rim; 7x57 Rim; 7.64 m/m; 8 m/m Mann; 8 m/m Mauser; 8x57 Rim; 8x50 Rim Steyr; 9 m/m Mann; 9.5 m/m Mann; 9.3x72R and others.

Winchester 61 Pump Repeater, .22 W.R.F.	$49.95
Winchester Model 70, Standard Open Sights	109.50
Remington 141A Gamemaster, .35 caliber, 24"	104.95
Remington Streamlined Auto, Lightweight, 12 ga.	99.95
Colt Woodsman Target Model, 6" barrel	70.00
Colt Detective Special, 38 caliber, Blue	65.00
Smith & Wesson K22 or K38 Masterpiece	65.00
Colt Unit .22 caliber for .38 Super & .45 Auto.	40.00
.41 Swiss Rim Fire, 300 grain, lead, per 100	13.75
.303 British cartridges .174 gr., M.P., per 100	7.50
7.5 m/m French MAS, Mle 1936, per 100	15.00
Magazines for High Standard .22 Auto. All Models	2.50
Barrels for S&W 1917 .45 caliber, 5½"	5.95
Barrels for .45 Colt Auto. $4.95—Magazines	1.65
Colt and Smith & Wesson & Carbine parts. See List.	

HUDSON SPORTING GOODS CO.
R-52 Warren St. New York 7, N. Y.
FREE:- COMPLETE LIST. New Stock coming in every day. (No C.O.D.'s)

NEW FRANZITE GRIPS

Plastic: Ivory, walnut, onyx, petrified wood, black.	
HD-Mil. Hi Standard	$3.00
Walther PPK	5.00
P-38 Walther 9 mm DA	4.50
.32 Mauser DA HSC	3.50
.32 Walther PP DA	3.50
Radom P-35 9 mm	3.50
9 mm Belg. or Can. Brng. Bl935	3.50
.32 & .380 Sauer DA Model 38	3.50
Colt .45 Auto., .38 Super, .22 Ace	3.00

LINWOOD SPORTS CO.
P. O. Box 377 **Linwood, Mass.**

SPRINGFIELD STOCKS

M 1903 A1—New, Semi-Pistol Grip $1.90 ea.—2 for $2.90—$12.00 per doz.
Garand M1—Used—Good—Butt stock only with ferrule $1.50 ea.
Postage Paid with prepaid Orders
R. FASSIO ● 467 Pennsylvania Ave. San Francisco 10, Calif.

NEW Cline 90° SWIVELS

WON'T LET SLING TWIST OR TANGLE

Cline's new exclusive feature does not permit the swivel to turn beyond 90 degrees without pressing the release button. The easy to push release button permits quick detaching.

Precision machined of hardened steel. Seats are honed for smooth swiveling. . . . Easy to install. Available for four strap sizes—⅞", 1", 1¼", 1½". Specify size.

$2.75 Per Pair Complete Postpaid

At Better Dealers, or Mail Coupon Below.

Extra Bases for Extra Guns—$1.25 per pair.

MICHAELS of OREGON
2011 S. E. Lambert, Portland 2, Oregon

Please send_____pairs of CLINE 90° SWIVELS
Sling size_____. $2.75 per pair enclosed.
_____Pairs of extra bases @ $1.25 per pair.
(No C.O.D. Please)

NAME_____
ADDRESS_____
CITY_____ ZONE___ STATE_____
DEALER'S NAME_____

NEW COLT OFFICERS MODEL SPECIAL

Features Heavy Target Barrel

FRONT SIGHT, fixed, glare-proofed, with serrated ramp base.

COLTMASTER REAR SIGHT, click adjustments for elevation and windage that won't shoot loose; glare-proofed.

HAMMER, special deep-cut for easy cocking.

Here's a new Colt designed for *champions,* with a balance that is perfection plus! The New Officers Model Special has a heavy target barrel that provides the shooter with weight up front where he needs it. Sights are the same as on the popular new Colt Match Target, the hammer deeper cut and grooved for cocking ease. Overall length 11¼", available .38 Special and .22 Long Rifle, weight 39 ounces and 43 ounces respectively. Finished in Dual-Tone blue, this handgun looks every inch the champion's companion that it is!

COLT'S MANUFACTURING COMPANY, HARTFORD 15, CONN.

COLT

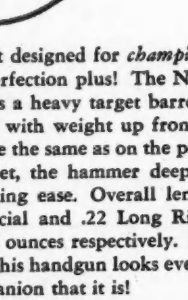
— LOOK AT THE RECORDS HELD BY COLT REVOLVERS AND AUTOMATIC PISTOLS! —

5 YEAR WRITTEN GUARANTEE
17 JEWEL CHRONOGRAPH
2 PUSH BUTTON

ORIGINALLY $71.50

- Wristwatch
- Stopwatch
- Telemeter$
- Tachometer

Our Price Now Only **21.95** Plus $2.20 Tax

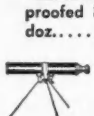


Precision 4 in 1 Timepiece. Incablock shock resistant feature. Sweep second hand. Anti-magnetic. Radium Dial. Stainless steel back. Unbreakable crystal. Perfect for physicians, scientists, technicians, engineers, aviators, photographers, broadcasters, navigators, sportsmen, servicemen, etc. Thousands sold at $71.50. Order now while they last at this record breaking low price. Send only $1 down payment with order. Pay balance to postman on arrival plus postage. Or we pay postage if you include full payment plus tax with your order. **FREE! Handsome Expansion Band Included.** Money back in 5 days if not delighted. Order now!

MARYLAND DISTRIBUTORS, Dept. 71
501 E. Baltimore St. Baltimore 2, Md.

SPECIAL PRICES!

Moulded CARRY-LITE Pintail and Mallard decoys. Waterproofed both inside and out. Reg. $13.20 doz.....*Now only* **$8.95**



20 power Davidson Mark 218 Scope and Stand (not sold separately) Reg. $27.25, *Now only* **$16.95**

OL' SARGE GUN RODS

#122 for 30 to 45 cal., Reg. $5.00 NOW $2.50
#118 for 22 to 27 cal., Reg. $3.50 NOW $1.75
#123-410 for 410 ga.
#123-20 for 20 ga.
#124-16 for 16 ga.
#124-12 for 12 ga.
} Reg. $2.00 NOW $1.00

Ol' Sarge GUN OIL.....2 cans for **25c**

MINIMUM ORDER $1.00

No C.O.D.'s please . . All prices F.O.B. Beverly Hills Add 2½% Sales Tax in Calif.

KERR'S 9582 Wilshire Blvd., Beverly Hills, Calif.

LEE TACKHOLE DOT

THE ORIGINAL

Center Dot reticule for scope sights, made only by Lee. Will improve YOUR shooting. Now standard factory equipment in America's finest scopes. Bausch & Lomb, Lyman Alaskan, Challenger and target scopes, Unertl, Fecker, Stith Cub and Texan, their choice after comparison and exhaustive tests. Gold award by Sportsmen's Research Institute. Look for the Lee Label on each scope to avoid being sold an imitation. New scopes Lee Dot equipped, standard prices, Lyman Alaskan, Challenger, Weavers, all models, Cub, Texan. Prompt installation in your scope. Free illustrated folder and price list for the asking. Regular discounts to legitimate dealers.

T. K. LEE
PO Box 2123, Birmingham 1, Alabama

GUNSMITH TRADE DOPE

☆ ☆ ☆

Ray Biehler, 1597 Ridge Road West, Rochester, N. Y., known for sometime among bench-rest shooters for his special dies and swages, is in a position to supply his bullet core swage now. Showing the finest workmanship inside and out, the highly finished die does the job of swaging lead wire slugs to exacting weight specifications and dimensions to fit inside regularly used copper-alloy jacket material. The tedious job of lapping internal dimensions to exact size requires that the dies sell for $22.50 complete with ram to fit in the Pacific tool. We find this tool to be all that the maker claims. All dies are sold on an unconditionally guaranteed basis. Later, the Biehler precision core seating dies, along with punches for bullet swages to fit the special ram by the same maker, will be available.

☆ ☆ ☆

Rusteprufe Laboratories, Sparta, Wis., have developed several interesting lubricants for use both as wad material and lubricant for either jacketed or lead-alloy bullets.

The nonabrasive Tear-Drop colloidal graphite wad lubricant consists of cellulose acetate saturated with twenty-eight percent colloidal graphite. Applied to the base of bullets with a small brush, the lubricant contains a fast-drying material which leaves the graphite adhering securely to the base of the bullet, with no danger of it dropping off to mix with the powder or melting in very hot climates.

The Aqua colloidal graphite lubricant is intended to be painted on bullets or sprayed on, or the bullets are dipped in the solution. We found that accuracy actually was improved by painting the bullet nose section of lead-alloy .270 bullets after they had been seated in the cartridge cases.

☆ ☆ ☆

Huizenga Gun Shop, Zealand, Michigan, has developed a rear sight sleeve to fit on standard Mauser military barrels which can be furnished in a kit which includes a rear sight base, rear sight and ramp front base and front sight with the necessary screws and instructions for attaching. Ready to fit, the price of the kit is $9.75.

When a receiver sight is to be used on a remodeling job, the sleeve can be attached by spot welding and the practical open rear sight left off. The sleeve is a nice fill-in for those machine-inletted stocks made for Mauser rifles in their original condition with rear sight sleeve attached.

Another item available from Huizenga is an excellent greaseless cutting and buffing compound coming in three grades from No. 150 to No. 220. The material is to be used on cloth and muslin buffing wheels, and it does an excellent job down to the final polishing before bluing. Adhering well to buffing wheels, the compounds are rather economical at the price of $1.35 for a three-pound tub.

☆ ☆ ☆

M. L. Smith, Route 3, Bryan, Texas, has long been noted for his special trigger work, installing what he calls his Slick Trigger. The job includes removing the first stage of the military pull and in most cases, like on the

Enfield, shortening the striker travel for quicker lock time.

A redesigning of the alteration has made reduction of the price to $6.00 possible, and at the same time requires that only the trigger and complete bolt mechanism be sent for the work.

Another Smith specialty is producing extremely lightweight sporting rifles with lapped barrels. Many of these jobs, rifles weighing around 7½ pounds but using such powerful cartridges as the .270 Winchester, we are told, are producing near minute-of-angle accuracy.

☆ ☆ ☆

Miller Single Trigger Co., Millersburg, Penna., has long been noted for the Miller single selective trigger for shotguns. Elmer Miller of the Company has made them up for many different models. Now he has designed a rather unique single set-trigger for rifles. The design, which does not include many intricate parts or heavy springs, consists of three large parts and one small spring securely pinned together into a compact unit.

The main feature is simplicity, and the trigger works well. The price is $25 installed. It is advisable to send the rifle for installation, as each one is fitted individually. The Miller trigger we are using provides a good, clean, three-pound straight pull, or, when the trigger is pushed forward, a very acceptable set-trigger which trips at slight pressure.

When the trigger was first brought out, the one objection we had was the absence of an adjusting mechanism. Now such adjustments are possible so that the trigger pull can be set to a few ounces or the adjusting cam can be turned off altogether for a conventional trigger pull.

☆ ☆ ☆

Mykrom Company, 1335 S. W. Morrison St., Portland 5, Oregon, is now in production on its all steel side mount with patented interlane lock mechanism which insures that the scope go back to a constant zero.

One feature of the mount is the special V-block inserts which, with different size scope retainer bands, permit the use of any internally adjustable scope in the one mount. A knurled locking cylinder securely locks the two parts of the mount together.

We consider the Mykrom a very rugged and dependable side mount. With it, the scope may be removed or replaced in a few seconds. The complete mount lists at $14.85. Extra V-blocks with bands are available for scopes having ¾-inch, 22mm., ⅞-inch and 1-inch diameter tubes.

☆ ☆ ☆

Fred Petmecky, gunsmith of 4436 Canal, Houston 11, Texas, has withdrawn from the market the ventilated ramps which he has advertised in the last two issues of THE RIFLEMAN on account of an apparent patent infringment.

☆ ☆ ☆

Sturm, Ruger & Co., Inc., of Southport, Conn., will be on the market shortly with a new .22-caliber target pistol, the invention of Mr. William B. Ruger. The inventor's models that we saw last fall appeared quite promising, but we will be unable to report fully on this new gun until we receive the first actual production samples, which are expected shortly. Meanwhile, advance informaton can be had from the company.

PEQUOT GUN RACK

...Adds Decorative Beauty to any Room

Protect your guns from the wear and tear of just "lying around". Hung in a cozy corner of the living room the PEQUOT GUN RACK will impart a delightful touch of hunting atmosphere. And what a beautiful Rack this is—a Nimrod Product—of unique, graceful design . . . cut from selected, finely grained Walnut with hand rubbed finish. Self-leveling feature allows any type gun to rest securely in horizontal position. Four gun size (holds 2 to 4 guns)—$7.95. Six gun size (holds 4 to 6 guns)—$10.95. Also Hangers (no cross pieces) for single gun—$2.25. Clip this ad and send with check or money order. Shipped postpaid. Money back if dissatisfied.

THE NIMROD CO. (Div. of Geo. Marnhout Co.)
Dept. R-89, 1701 Arch St., Philadelphia 3, Pa

ARMY AUCTION BARGAINS

Revolver nipple wrench	$ .80 each
C.W. Musket hammer	.50 "
Krag rear sight, Mod. '92, new	1.00 "
Sharp's main spring	1.00 "
Sharp's rifle butt, patchbox cut	.95 "
Shot gun nipples	.25 "
Flints, assorted per dozen	1.00
1903 Bayonet & Scabbard	1.50 "
1903 front sight cover	.25 "
Machete, 18 inch & scabbard, new	2.25
Antique oil cup	.25 "
Springfield 45-70 firing pin	.40 "
Mauser headless shell extractor	.50 "
45-70 Springfield headless extractor	.25 "
45-70 Springfield globe sight cover	.35 "
U.S. 1842 Bayonet	1.00 "
Confederate Enfield bayonet	.45 "
Russian Rifle rod 28½"	1.00 "
45-70-500 Lee-Remington Magazine	.55 "
5¼" flint lock plate with pan only	.60 "
8MM Mauser Cartridge Box, 1888 Model	.35 "
45-70 Gun Sling, used	.30 "
303 Ross Rifle Model 1905	23.50

Prices DO NOT include postage:
1949 catalog, 308 pages mailed in U. S. for $1.50.
New 12-page circular for 10 cents.

FRANCIS BANNERMAN SONS
501 Broadway New York 12, New York

BOLTS

- Altered for Low Scope ....$ 7.50
- Polished & Jewelled Precision Indexed 6.50
- Special—Both for 12.50
- Rifle Stocks hand-fitted by an expert (no gaps), from 40.00
- Improved Bluing Salts and Equipment
- Send us your address today for our complete catalog of services.

KESS ARMS COMPANY
1004 West Center St. • Milwaukee 6, Wisc.

INLETTED GRIP BLOCKS

Precision inlet black walnut blocks in matched pairs. Plenty of wood for any type of grip. Made for all popular S&W and Colt revolvers. Screw and escutcheon furnished, per pair $1.75. Two pairs—any model—$3.00. Hand fitted to K or O.M. frame—nothing for you to do but carve the outside. $3.00. High Standard and Woodsman inlet blocks only—no screws, per pair—$1.25.

BOB WINGER • 718 Broad St. Montoursville, Pa.

FOR SALE: THIS SPACE -- AT LOW COST

A display ad of this size measures 14 agate lines or one inch. It costs $30.80 per issue if less than six insertions are used within one year; $29.40 per issue for six or more insertions in a year; only $28.00 per month for twelve consecutive insertions. THE AMERICAN RIFLEMAN circulation is now well over 315,000 copies monthly. We will be glad to help you in writing "copy," making "lay-outs," etc. No charge for this service, of course.

EMBLEMS
BRASSARDS
SPORT BUTTONS
FREE LITERATURE
GEORGE O. WOOD - 124 Ontario St., Lynn, Mass.

THE OLD DOPE BAG OFFERS

NEW NESS SELECTED SUPPLIES
(All Delivered Postpaid)

BANTA Bullet Dies for HOLLYWOOD Tool	$40.00
HOLLYWOOD TOOL with UNIVERSAL Dies	37.50
NITRO PRESS Reloading Dies, multi-case	7.50
SAECO Electric Furnace, thermo-control	28.50
SISK .22 Bullets, 35 to 41 gr. per 100	2.25
Lead Cutter, $5; Core Swager, $4; Jackets (M)	7.50
8X ⅞" Spot Shot Attachment for G4	9.00
LITSCHERT 8X with G4 Weaver @ $9.75, both	18.50
6X VM Attachment ($17.50) and J2 5 Weaver	40.00
HILL Ring Mts. for light .22 S.S. rifles	10.00
2½X LEUPOLD Pioneer ($40) and Adjuste Mt.	60.00
24X UNERTL Prismatic Spotting Scope	80.00
30X DAVIDSON Mark 245 Prismatic Spotter	84.50
M245 Stand, $15.75; extra Eyepieces 15-40X	15.00
PACHMAYR Lo-Swing scope mount	20.00
Clear Sight Scope Caps or leather covers	1.75
Power-Pac Shot Control for single bbls.	18.50
WEAVER Shotgun Choke and any 2 tubes	10.25
Takedown Shotgun Case, buckled, sheepskin	10.00
M&G Fast Action Safety, $2.50; CROWE Rotary	2.00
MILL-ROSE All Gauge Jointed shotgun rod	1.50
MERSHON Deluxe White Line Recoil Pads	3.50
PACHMAYR 4-gun Handgun Case (5-gun $24.50)	19.75
WISLER 3-gun Bantam Pistol Case	27.95
Sheepskin Holsters, $2; Flat Mats, zippered	3.00
Official Pistol Scales	7.50
Pearl, Ivory, Stag grips plain and carved (write)	
JAEGER Strong QD Swivels, 1" & 1¼", set	3.75
Leather Slings; 1" carry, $1.25; Military	2.50
K&K Short Sling ($1.50) and KING Kuff	5.00
KIPPS & KING Deluxe Shooting Mats	11.00
WISLER Kit 22, $19.95; Kit 30	27.00
KOPLIN Rifle & cope Case, strap & zipper	12.00
Buckled end & strap, $11; luggage handle	9.50
Full length rubberized Gun Cover, tipped	2.00
4X HENSOLDT Dialytan Hunting Scope & Cap	77.00
HERKNER Echo split-ring Bracket Mounts	17.50

Write for catalog
(Send letterhead for discount sheet)

FRED NESS SELECTED SUPPLIES RED WING, MINN.

BINOCULARS REPAIRED

Parts Replaced Work Guaranteed

Write or mail binoculars for FREE estimate

HANSEN'S
3350 Vine St. **HOBBY** Denver, Colo.

RIFLEMAN'S SELF-COUNTING SHELL BLOCK

.22 CALIBER

$3.50 Postpaid

Five "Sighting Shots" for 100 yd. range.
Two rows ten each for 100 yd. record.
Five "Sighting Shots" for 50 yd. range.
Four rows five each for 50 yd. record.

Scientifically designed to cover 50 and 100 yard range. Made of top quality seasoned Black Walnut.

W. R. GOOD DISTRIBUTING COMPANY
5015 Detroit Ave., Cleveland 2, Ohio

W. R. Good Distributing Co.
5015 Detroit Ave., Cleveland 2, Ohio
Gentlemen:
Please send me ..... Self-Counting Cartridge Block(s). I enclose $..... ☐ Cash ☐ Check
☐ Money Order. I understand you will ship postpaid if I have included remittance, and that I may return my order within 5 days for full refund if I am not satisfied. ☐ Ship C.O.D., I will pay Postage.
NAME .....
ADDRESS .....
CITY ..... STATE .....

RELOADING

COMPLETE STOCK HORNADY, SPEER AND SIERRA BULLETS. Orders shipped same day as received.

SPEER—

	Per 100	Postpaid
.257" cal. 60 gr. SP and 87 gr. spitzer SP		3.75
.257" cal. 100 and 120 gr. Spitzer SP		4.00
6.5 mm cal. 120 gr. Spitzer SP .263"		4.00
270 cal. 100 gr., $4.25. 130 gr., $4.50. 150 gr		4.75
7 mm cal. 130 and 145 gr., $4.50. 160 gr.		4.75
30 cal. 110 gr. Ptd. SP .3085", Hi-velocity		4.25
30 cal. 150 gr. Rd nose SP with cannelure		4.50
30 cal 150 gr. Rd nose SP not cannelured HV		4.50
30 cal. 150 gr. spitzer SP, not cannelured. HV		4.50
30 cal. 180 gr. Rd nose or spitzer SP, HV		4.75
.311" cal. 180 gr. Rd nose SP for the 7.7 Jap		4.75
8 mm 125 gr. Ptd. SP .323"		4.25
8 mm 170 gr. Round nose SP .323"		4.50

SIERRA—

.224" hi-vel spitzer or round nose (state which) SP bullets, 45, 50 and 55 grain. $2.75 per 100 postpaid.

SIERRA HORNET BULLETS. 40 and 45 grain round nose soft point, .223" or .224", $2.25 per 100 postpaid.

SIERRA .30 CAL. BULLETS. Spitzer SP. 125 gr., $4.25. 150 gr., $4.50. 180 gr., $4.75. Per 100 postpaid.

SIERRA .25 cal. 100 grain spitzer SP, $4.00 per 100.

HORNADY .30 caliber BULLETS, 150 gr. HV type, spire pointed soft point, $4.50. 110 gr. Ptd. SP, $4.25. 180 gr. Rd nosed SP, $4.75. Per 100 postpaid.

HORNADY 270 cal. 100 grain spire point, $4.25. 130 grain spire point, $4.50. Per 100 postpaid.

FACTORY BULLETS. We have various calibers Winchester bullets in stock. Price list mailed on request.

LYMAN SHOT SHELL RELOADING TOOLS. Now available. Write for descriptive literature and prices on tools, wads, primers, etc.

AMMUNITION. Large stock of most all popular calibers. At reduced prices. Write for price list.

EMPTY PRIMED SHELLS, in stock. Per 100, FOB here. Hornet and 32-20, $4.60. 2R Lovell, $5.65. 22 Sav. HP, 25-35, 25 Rem., 30-30 and 32-40, $7.10. 220 Swift, $7.80. 300 Sav, $8.00. 7mm, 270, 30-40, 30-06 and 8mm, $8.20. 375 H&H, $11.00. 44 S&W Spl, $3.55. Other calibers will be in our stock soon.

WILSON TOOLS. Trimmers, case gauges, inside neck reamers, primer pocket reamers, sizing dies and punch & base sets. All carried in stock.

HOLLYWOOD RELOADING TOOL. Latest heavy duty model, complete for one caliber, $37.50.

UNIVERSAL Model "A", $47.50. Model "B", $55.00. We carry a large stock of the Universal dies in all popular calibers. Sizing die, expander unit and seating die, per set, $12.50. Will fit the Hollywood, Universal and Pacific tools.

PACIFIC SUPER TOOL, complete, $38.75. Standard model, $31.50. Extra set dies non-crimp, $12.50. With crimp type seating die, $13.50. Shell holder, $3.85. Hornet Shell holder, $4.85.

BELDING & MULL Model 28 tool, complete $19.50. Without bullet seating die, $16.50. B&M model 26 bullet seater, $4.00.

LYMAN No. 310 Tong tool in all popular calibers, complete, $9.85 postpaid.

SUPPLIES •

LYMAN TRU-LINE JR. Bench tool, complete, $22.60.

SMILEY CASE TRIMMERS. Model 490, complete with one pilot, state caliber, $10.50. Extra pilots, .50¢ each. All other Smiley tools carried in stock.

IDEAL PRIMER POCKET REAMERS. For removing crimp from Gov't 30-06 cases, each, $2.50.

LOADING BLOCKS, twenty hole, .60¢. Fifty hole, .75¢.

IDEAL BULLET MOULDS, single cavity, regular type, with handles, $6.00. Block only $4.00. Hollow point and hollow base moulds, $2.00 extra.

IDEAL DOUBLE CAVITY MOULDS, $8.50. Blocks only $6.50. Uses single cavity handles. Ideal melting pots, $1.25. Bullet running dipper, .75¢. Ideal bullet lubricant, per stick, .25¢.

IPCO GRAPHITE WADS, .033" and .046", per box, $1.00. IPCO BULLET LUBRICANT, per stick, .50¢.

IDEAL NO. 45 SIZER & LUBRICATOR complete, $12.50. Extra set die & plungers, $3.00. Top punch only, 75¢. Sizing die only $1.50.

IDEAL NO. 55 POWDER MEASURES, $10.00.

BELDING & MULL VISIBLE POWDER MEASURES, $12.50.

SAECO POWDER MEASURES, complete with one drum and bench stand, $17.75. Extra drum, rifle or pistol, $4.00. Extra drop tube, small or large, $1.00. Quick detachable fitting, $2.00.

REDDING POWDER SCALES. We highly recommend this fine product. Fast, accurate, dependable. $11.95 Postpaid.

PACIFIC POWDER SCALES, $8.85 postpaid.

IDEAL HANDBOOK No. 36, 50¢ postpaid.

BELDING & MULL HANDBOOK, .60¢ postpaid.

PHIL SHARPE'S "COMPLETE GUIDE TO HANDLOADING." $10.00 postpaid.

POWDER FUNNELS. Aluminum. Made to fit over neck of case, so specify shell to be used for. each .75¢.

LYMAN GAS CHECKS. .22, .25, .270, 7 mm and 30 cal. $1.75 per 1,000. .32, 8 mm and 38-55 cal. $2.00 per 1,000.

POWDER. DuPont Nos. 4320, 4064, 4350, 3031, 4227, 4198. $1.90-lb. Hercules Hivel No. 2, 2400, $2.00-lb. DuPont 4759, No. 6, No. 5066 pistol, DuPont bulk shotgun, DuPont MX, Hercules Red Dot and Herco shotgun smokeless, $1.15 per ½-lb. Hercules Unique, 13 oz. can, $1.80. Bullseye, 11-oz. can, $1.60.

PRIMERS. Win., Rem. and Western. All rifle & pistol sizes, $6.75 per 1,000. Smaller lots are .66¢ per 100 plus a packing charge of .25¢ per shipment.

WINCHESTER No. 209 Shot-shell primers, $7.50 per 1,000.

REMINGTON No. 57 Shot-shell primers, $12.10 per 1,000.

LEAD SHOT, CHILLED ONLY. Sizes 1 to 12, $1.50 per 5-lb bag. $7.25 per 25-lb bag. FOB HERE.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE. ABOVE ITEMS ARE PRICED FOB HERE. Include postage for parcel post shipments unless otherwise stated. Stamps appreciated for catalog.

LINDAHL GUN COMPANY
CENTRAL CITY • NEBRASKA

SPECIAL TO DEALERS

AMMUNITION

22 Long Rifle Shot, per M	$ 8.00
25 Automatic, per M	24.00
32 Automatic, per M	34.00
380 Automatic, per M	42.00
9 M/M Luger, per M	40.00
6.5x54 M. Sch., 139 gr., per 100	12.00
6.5x57 154 gr., per 100	13.50
6.5x57 rim, 154 gr., per 100	13.50
7x57 Mauser, 173 gr., per 100	12.00
7x57 rim, 173 gr., per 100	15.00
8x57 Mauser 196/239 gr., per 100	9.00
8x57 rim, 196 gr., per 100	14.00
8x60 rim, 204 gr., per 100	15.00
9.3x72 rim, 193 gr., per 100	16.00
9.5x57 M. Sch., 270 gr., per 100	15.00

Also, 6.5x53R, 6.5x58R, 7x64, 8.15x46R, 8x50R, 9.3x74R.

Cartridge Clips for 8x50R Steyr, per doz... 4.00

7x50 Binoculars — New. $31.75 each. Leather carrying case included.

PEERLESS VENDING CO.
220 West 42nd St., New York 18, N. Y.

6 POWER PRISM BINOCULARS

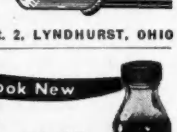
VEST POCKET IN SIZE

Dynamic in power and range. At 1,000 yards has sharp, clear field of 370 feet! Made to **military specifications.** Moisture proofed—Dust proofed! All metal construction. Individual eye focussing. Adjustable for all eye widths! A compact, durable, all-purpose, **prism binocular.** NOT a field glass. Economy priced at fraction of what similar glasses sell at retail! Complete with quality leather, plush-lined case and straps only $19.95 plus 20% Federal tax. Cash orders sent postpaid. On C.O.D.'s, include $2.00 deposit. **GUARANTEED.** Try for 20 days at our risk and expense.

UNITED PRODUCTS CO.
7941 S. Halsted. Dept. ARF-3109. Chicago 20, Ill.
Reference Dun & Bradstreet

WOODFORD MUZZLE-CAPS

Keep bores free from dirt, snow, etc! ANY GUN CAN BE FIRED WITH MUZZLE-CAP IN PLACE! Positively will not affect breech pressure, safety or operation of gun. Oil-resistant elastic Neoprene. Approved by NRA and leading gun authorities. Rifle, shotgun, scope sizes. Pkg. of 10, 35¢. 3 pkgs., $1.00.



WOODFORD MFG. CO., Dept. 2, LYNDHURST, OHIO

Makes Old Guns Look New

Van's INSTANT GUN BLUE

$1.00 Kit... Removes grease, penetrates rust, leaves a satin blue-black finish. Takes minutes, not hours. Kit includes Gun Blue, cotton, Crocus cloth and steel wool. Ask your dealer...or write for folder.

C. S. VAN GORDEN & SON EAU CLAIRE, WIS.

FIREARMS •

Large selection of new sporting guns. Selected used firearms. Excellent foreign guns. Custom guns, barrels, actions. *We AIM to please.*

WOLFF'S 456 Kirk Ave. Syracuse, N. Y.

• MICRO-MOVEMENT TRIGGER •

A new and superior trigger mechanism for Mauser, Springfield, Enfield, Rem. 30 and 720. Eliminates takeup, creep and backlash. Easy to install. Price $15.00.

UNCONDITIONALLY GUARANTEED

Complete custom rifle service in most standard and Wildcats from light Sporters to Bull Guns. Custom Stock work of the highest quality in Walnut, Maple and Mesquite. Prompt Service.

ALLEN TIMNEY, GUNSMITH
• 5832 Oliva Ave. • Bellflower, California •

Hollywood Gun Shop, 6032 Hollywood Blvd., Hollywood 28, Calif., now handles the line of foreign-made ammunition and reloading components formerly sold by the Transocean Trading Company, which includes the famous RWS bullets and cartridges, as well as Berdan primers and components. All primers are the nonmercuric type. A mimeographed list of ammunition and components available may be obtained for the asking. The component line includes the excellent H-Mantle and D-Mantle bullets in several calibers, including the 7 mm. and 8 mm.

☆ ☆ ☆

W. R. Hutchings, 4504 W. Washington Blvd., Los Angeles 16, Calif., is now producing what may be called a completely machine-inletted sporting-type stock for Enfields, M98 and FN Mausers, as well as for Springfields.

An Enfield action with standard service barrel fitted well in one of the stocks after less than 15 minutes work sanding off a few high spots, particularly along the top edges of the barrel groove. The outside dimensions were much to our liking, and no wood was removed except for the finishing job. The outside dimensions are as small as are practical. A rather high cheekpiece is well-shaped, sloping downward to the point of the comb. The particular rifle we fitted with the Hutchings stock weighs 9¾ pounds complete with Texan scope and Buehler mounts.

The stocks made from well-seasoned black walnut list at $18. When fitted by Hutchings to fit the customer's rifle, sanded and finished and with butt pad they list at $35.00.

BOOK REVIEWS

FIELD, SKEET, AND TRAP SHOOTING

By Charles Edward Chapel

In the introduction, Alex Kerr points out "This book was designed primarily for those who have had only some small experience or are beginners, in the art and science of shotgun shooting." While the author apparently had aid to the new shooter foremost in his mind, I doubt if there are any open-minded experts with an interest in the sport who would not enjoy reading this book. Even if some of it is pretty elementary to them, there are numerous suggestions on shooting techniques and there is considerable good reference material.

Chapel doesn't miss much in this book that will be of aid in getting the beginner started. He has some good suggestions on selecting the proper gun, how to handle it safely, and how to shoot it, in each of the three phases of shotgunning named in the title. He includes some helpful data on trap and skeet layouts with details of construction.

One of the finest features of this book is the author's recognition of the fact that people differ in their tastes, physical requirements, and psychological make-up. He gives the necessary fundamentals of shooting and the limitations which should influence the selection of a shotgun but he does not insist that there is only one gun and one rigid prescribed method by which one can become a good shot.

The book is well illustrated and indexed. It is well organized to use as a reference.—E. B.

(Published by Coward-McCann, Inc., New York, N. Y. 288 pages. Illustrated and indexed. Available through NRA Book Service. Price $5.00).

THE ARMS CHEST

GENERAL REQUIREMENTS APPLICABLE TO CLASSIFIED ADVERTISING

1. Rate: 25 cents per word including name and address—minimum charge $3.00. Advertisements *must be accompanied by remittance,* made payable to "National Rifle Association"—1600 Rhode Island Ave., Washington 6, D. C. *Insertion will not be made until payment is received.*

2. Closing Date: All advertisements must be received with advance payment by not later than the 1st of the month preceding date of issue. (Example: August 1st for the September issue. Ads received after August 1st and not later than September 1st will be inserted in the October issue.)

3. Who May Advertise: Any individual or firm whose advertisements and methods of doing business meet our requirements may advertise their goods or services in the ARMS CHEST.

4. All Orders Subject to These Conditions: We reserve the right to edit all copy to conform with our standards and to reject or discontinue any advertisement which we consider undesirable.

5. Transactions Based on Good Faith: ARMS CHEST transactions are based on good faith and mutual satisfaction. Deliberate misrepresentation, disregard of usual business ethics, or the attempt to circumvent these general requirements, will result in refusal of further advertising and might result in disbarment from the NRA, in the case of members.

6. Blind Ads Not Acceptable: Blind ads, with box numbers *only,* will not be accepted. Give your COMPLETE name and address, to insure prompt delivery of all mail or telegraph replies.

7. How to Count Numerals, Etc.: Groups of figures are counted as one word (example: .30-30, 250-3000, $150.00, $1.50). Abbreviations consisting of initials or single characters are counted as one word (example: W. H. Smith; H. B., meaning heavy barrel). Hyphenated words are counted as two words (example: 20-gauge, pearl-handled, no-slip).

8. Responsibility for Illegible Copy: Type or print ads plainly, for we can not be responsible for errors due to illegible writing.

9. Firearms for Sale or Trade Should Be Properly Described: We urgently recommend that the *condition* of every gun (including essential parts) advertised for sale or trade, be clearly indicated in accordance with the following *NRA standard descriptions:* PERFECT—meaning factory condition; EXCELLENT—meaning new condition, implying negligible amount of use; VERY GOOD—meaning practically new condition; implying little use, with no appreciable bore wear and only minor surface scratches or wear; GOOD—meaning moderate use with some finish worn off, only moderate bore wear, with no pits and nothing worse than a little roughness in the bore; FAIR—meaning no parts missing necessary to use of gun, reasonable wear inside and out, nothing worse than minor pits in steel or stock, gun sufficiently accurate for hunting. POOR—meaning marred appearance and pitted or badly worn bore.

We further recommend that when price lists or catalogs are offered, the *condition* of every weapon or item so listed be properly described in accordance with these NRA standards.

WARNING TO PURCHASERS: The National Rifle Association *will accept no responsibility whatever* for any unsatisfactory transactions involving guns or other items which have not been described in accordance with the foregoing NRA standards. It is therefore important for purchasers to *insist* that sellers give full and complete descriptions of all items in accordance with these standards—*before* any such transactions are consummated.

10. Privilege of Examination: Requesting shipment by express C. O. D., *with examination privileges* will permit the purchaser to inspect the merchandise *in local express office* and authorizes the express company to return unsatisfactory merchandise at shipper's expense.

11. The National Firearms Act forbids the sale of the following: (*a.*) Full automatic machine guns. (*b.*) Rifles and shotguns with barrels less than 18 inches in length or 16 inches in the case of a weapon of .22 or smaller caliber. (*c.*) Handguns such as the Mauser or Luger automatic pistols, when such weapons are equipped with detachable butt stocks, except that all of the above may be sold by a Federal licensed dealer who has paid the special tax required by Section 3260, Internal Revenue Code. NOTE:—"Barrel length", as it applies to the above, is determined by the insertion of a cleaning rod from the muzzle until it comes to rest against the face of the closed breech.

In addition, the NRA has adopted a policy of not accepting advertisements covering small *pocket* pistols or revolvers of less than .38 caliber, or with barrel lengths of 2 inches or less, which have no practical value as target, police or military weapons.

12. Fair Trade Laws: All states with the exception of Missouri, Texas, Vermont and the District of Columbia have Fair Trade laws which permit manufacturers to contract with their distributors to maintain standard retail prices. Dealers who fail to do so are subject to legal action.

FOR SALE

PERSONAL COLLECTION MODERN FIREarms, All Brand New. Model 81C Marlin 22 . . . $20.00. Model 80C Marlin 22 . . . $16.00. Model 336 Marlin 30/30 carbine . . . $46.00. Model 88C Marlin 22 Automatic . . . $25.00. 12, 16, or 20 gauge L.C. Smith Field Grade . . . $75.00. Terms 10% down balance COD. Inspection allowed. W. M. Agee, Box 480, Selma, Alabama.

THROWING KNIVES, PERFECTLY BALanced, handcrafted, with sheath, instructions, $1.50 Postpaid. Stark Manufacturing Company, 1718-R Walnut, Allentown, Pennsylvania.

GOOD NEWS! PAUL RATLIFF, SPOKANE 14, Washington, is breaking up his famous collection of Single-shot and Big Game rifles. Wire, phone Glenwood 4172, or air mail. List for stamp.

BIG CATALOG, ANTIQUE GUNS, $1.00. 475 photographs. Satisfaction guaranteed. G. B. Hebard, Knoxville, Illinois.

SERVICEABLE SA COLT PARTS:—MAINspring $2.00; hammer $3.25; trigger $1.25; gate $1.75; ejector head $1.50; trigger guard $3.25; screws 35¢ each; .45x5½" barrels, pitted, $2.50. 20-shot magazine for .30/06 Springfield $6.75. C&B revolver repair parts. B. K. Wingate, Box 481, Reading, Pa.

PERCUSSION COLT AND REMINGTON parts. Flint and percussion locks. List 25¢. C. H. Weisz, 100 S. Uhle Street, Arlington, Virginia.

NAVY OXFORDS, GENUINE U.S. SURPLUS, finest black calfskin, famous makes, specify size, $7.95 check or money order (add 50¢ for postage and handling) AR Rudolph's, Atchison, Kansas.

OUT-OF-PAWN, "SHOTGUNS", "RIFLES", "Pistols." Big Savings, write needs, enclose stamp. Virginia Pawnbrokers, Danville, Virginia.

NEW BOUND CATALOG CONTAINING hundreds of antique and modern arms, edged weapons, cartridges, accessories, small antiques. 25¢. H. A. Brand, 105 E. Third St., Cincinnati, 2, O.

"WELCOME CONVENTION VISITORS". DO your Elk Hunting, Fishing and packing with Colo. Guide Association. Steamboat Springs, Colo.

GOING TO EUROPE FOR A NEW COLLECtion of firearms. Second edition catalog ready September. John Amber, 6806 Dorchester, Chicago, 37.

NEW CUSTOM DELUXE 270 MAUSER, Hooper barrel, beautiful Fagen stock, Redfield mount, Alaskan scope, dust caps. Outfit includes new Tex Tan sheeplined case, sixty rounds new ammo. $250.00. Member Haakon Olson, Thief River Falls, Minnesota.

LARGE COLLECTION OF AMERICAN AND European antique arms. Send 25¢ in coin for our 17th catalog featuring the private collection of a gentleman of Massachusetts. We buy whole collections or single pieces. Fair prices paid. Kimball Arms Company, Woburn, Mass.

CASWELL TARGET CARRIERS FOR INdoor rifle and pistol ranges. Prices from $22.80 to $31.20. Write Caswell Target Carriers, Anoka, Minnesota.

B.S.A., ERIC JOHNSON BARREL, TARGET Stock $150.00. Remington Pilot Model Martini Target Rifle, Vavers $150.00. Vickers H.B. Target Rifle $125.00. All very good or better. 30x Litschert Eagle scope, V.G. $85.00. Paul S. Meacham, 48 E. Union St., Geneva, Ohio.

PERFECT—M70—300 MAGNUM K4—ECHO—mount—recoil-pad sling $195.00. W. L. Zyromski, Castleton, New York.

FACTORY REJECTS—AMAZING VALUE! Same genuine Imported Briar as our regular $10.00 pipes. Have surface flaws not affecting superb smoking qualities. Outstanding buy. 2 for only $1.00. Satisfaction Guaranteed. Gaylords, Dept. 286, Brockton 64, Mass.

CARTRIDGE COLLECTORS' CATALOG—Entirely New Issue—#2, with illustrations and interesting data, invaluable for collectors, shooters and dealers. Most complete publication of its type. Sent postpaid for 35¢. Life Member. Philip Jay Medicus, Dept. A8, 18 Fletcher Street, New York 7, New York.

AMMUNITION - SHELL SHOP — WRITE needs, enclose stamp. Catalog—50¢—3709 Sunset Blvd., Los Angeles, Calif.

190 PAGE PROFUSELY ILLUSTRATED catalog crammed with antique and modern pistol, sword, dagger, etc. values sent on receipt of 50¢. Robert Abels, R680 Lexington Ave., New York, 21.

HI-NO. SPRINGFIELD, ISSUE, SERVICEable, excellent in, good out $50.00. Eddystone Enfield, 4 groove barrel, issue, serviceable, excellent in, good out $50.00. Win. Mod. 12—16 ga. 26" barrel, polychoke, excellent in, very good out, leather case $75.00. M.O. Please. P. Konchanin, R.D. 3, Freehold, N. J.

NATIONAL MATCH .45 COLT AUTOMATIC and .22 conversion kit. Excellent. $90.00. D. A. Philbrook, Gorham, N. H.

MAUSER, 22 CAL., BOLT ACTION REPEATer, perfect in, good out $65.00. Walther .22 cal. P.P. perfect in, finish worn $65.00. Barrels only, all perfect: Colt 6", HB, 38 Officers Model $10.00. S&W, 5", 38 M&P $6.00. Colt, 4", O.P. 38, $6.00. Luger Magazine $3.50. Gene Glover, 613 Clay, Paducah, Ky.

WINCHESTER, SUPER-GRADE 270, K4, LEEDot Jaeger-mount, excellent $250.00. Standard, 70, 30-06 & 270 excellent $125.00. F. S. McGill, 33 Garfield St., Waverly, N. Y.

AMMUNITION ADVICE FROM A SPECIAList. The fall season is drawing near. Don't wait until the last minute to place your orders. At the present time, we have, for immediate delivery, a complete and fresh stock over 325 types of Factory Loaded cartridges for practically all kinds of American and foreign rifles, pistols and shotguns. This is the largest variety offered by any firm in America and the prices are the lowest authorized by the manufacturers. Prompt service, orders shipped on day of receipt. Send 3¢ stamp for new 8-page list. Life Member Philip Jay Medicus, Dept A8, 18 Fletcher Street, New York 7, New York.

"We're Growing—thanks to you!

"Our first ads in the 'Arms Chest' section, produced so many orders from consumers and dealers we are now expanding our facilities and plan to run a sizeable schedule of display ads with you beginning next month."

Many thriving businesses have been built up from very modest beginnings, thru small classified ads in the 'Arms Chest.' Our 315,000 member-readers are always on the alert for new products or services which can add to the pleasures or comfort of themselves and their families.

And the cost of these classified ads is extremely low—only 25¢ per word, for a well-distributed *national* circulation.

☆ ☆ ☆

Copy for the October issue must reach us not later than September 1st. See above for detailed instructions.

What do YOU want, Mr. Shooter?

GET READY FOR THAT FALL HUNT

NOW! JOHNSON OFFERS YOU COMPLETE CUSTOM GUN SERVICE—AND GOOD DELIVERY—CHECK YOUR GUN TODAY—SEND IT TO US NOW—HAVE IT READY WHEN YOU NEED IT.

From correcting your headspace for $7.50 to a complete custom built rifle, the finest factory bluing of any rifle or shotgun for $10.00 or handgun $8.50. Increase your shooting enjoyment—Install the Famous Johnson Muzzle Brake—cuts recoil in half—improves accuracy—Readily available for standard and Magnum calibers—Ask for complete illustrated list of services and prices.

GUNSMITHS—DEALERS

LET JOHNSON BARRELS INCREASE YOUR SALES

From preturned barrel blanks in calibers 22, 25, 27, and 30 to complete rebarreling, headspacing, and proof testing in your actions, in most popular calibers, either "in the white" or polished and blued. Johnson barrels are made from the very finest gun barrel quality chrome moly electric furnace steel, specially heat-treated and stress relieved at the mill to our specifications.

JOHNSON AUTOMATICS ARMS INC.

Dept. R-7, P.O. Box 1512, Providence 1, R. I.

Successors to Johnson Automatics Custom Gun Department

GUN STOCK INLAYS
Plain and Fancy Diamonds, Etc.
Dealer Discounts
C. D. Cahoon, 16 North Stone Rd. Swampscott, Massachusetts

New! Safe! Convenient!

the GUN-TOTE

RIFLE OR SHOTGUN CARRIER FOR YOUR AUTO

● Neatest, most practical way of carrying guns—cased or uncased. Can be installed, removed in jiffy. Heavy rust-proof steel. Soft rubber lined. Money-back guarantee! **$3.50** as shown
SEE YOUR LOCAL DEALER, OR MAIL COUPON TODAY! fair-traded dealers invited

By popular demand — Model 1314, for carrying 4 guns, $6.50 pair.

DON BERRY, INC.
P.O. Box 24, Capitol Hill Station, Denver, Colo.
Please send immediately_____Gun-Totes.
Enclosed is $_____. (Sorry, no COD's)
Money-back guarantee! Please print.
NAME_____
STREET_____
CITY_____STATE_____

$5.00 Postpaid HEAVY LEATHER HAND MADE
JENSEN *De Luxe* Pat. Pend.

CARTRIDGE CASE

Fine, heavy leather, partitioned. Holds 20 high power rifle shells. Keeps them handy, dry, safe from loss or damage. Patented reinforced belt loop fits belts up to 2¼ inches wide. Lasts a lifetime. Money back guarantee. Specify your shell-calibre when ordering. Your name stamped in gold 50c extra. The finest, most practical and convenient cartridge carrier you can buy.

GEORGE L. JENSEN, 4102 W. 49th Ave., Denver 9

BARREL INLETTING RASP

THE RASP with a coarse and a fine cut. Since 1937, when I designed and offered this rasp, it has been the favorite of the professional and amateur Gunsmiths.

For fast cutting and smooth finishing, use this barrel inletting rasp.
Sizes: ½" and ¾" diam. 2" long.
Price: as illustrated_____each $2.25
Set of 2 rasps and one handle _____ $4.25

FRANK MITTERMEIER ● Gunsmith Supplies
3577 E. Tremont Ave., Bronx 61, N. Y.

GUNMAKERS *Precision*

TOOLS and ACCESSORIES

Chambering reamers, Sight Ramps, Barrel Vises, and other tools.
Your letterhead for catalog.
WRIGHT Gun & Tool Shop ● Bloomsburg Pennsylvania

---

100 BRAND NEW RIFLES ! ! REMINGTON M/721 .270, 30/06 $79.95. M/141 .35, .32 $104.95. M/81 .300 $129.95. Winchesters M/64 30/30 $82.95. M/64 Deer 30/30 $97.75. M/94 30/30 .32 Special $62.45. Model 43 Hornets and Bees $54.95. M/70 .270 $109.75. Genuine Waffenfabrik Mauser Oberndorf Pistol Cal. 7.63 about perfect, fired 8 rounds, with holster-stock unaltered $150.00. Livingston Shooters Supply, East Corinth, Maine.

LIMITED SUPPLY 30 CAL. REMINGTON Core-Lokt 150 gr. bullets. Bielefeld, New Knoxville, Ohio.

20 GA. L.C. SMITH, DOUBLE IDEAL grade, 30", imp. cyl, mod., very good $100.00. Spencer Smith, Alder Creek, New York.

HIGH NUMBER ISSUE SPRINGFIELD head space OK $50.00. Another, same receiver, partly polished $52.00. Another, same, home sporterized, new blued barrel, Herter stock, Redfield 70, altered bolt, homemade band ramp $72.50. New Enfield action, new unattached barrel $45.00. Other sporters $90.00 up. Money order you pay express. J. S. Walton, 2023 Monroe, Corvallis, Oregon, Member.

WINCHESTER MODEL 70 SUPERGRADE .270 checkered bolt nob, Weaver K4 crosshair, scope covers, Tilden mounts, folding leaf rear sight, five boxes Winchester 130 Gr. silvertips, all perfect, $225.00. C.O.D. James Cerf, Corsicana, Texas.

LUGER .22—9 M/M. 500 GERMAN TYPE conversion units. Write for price. Gun Shop, 268 Broadway, Somerville 45, Massachusetts.

WINCHESTER MODEL 21 DUCK GUN, AT least excellent, 30" full choke barrels, $235.00 cash, no trades. F. C. Wilcox, Box 271, Janesville, Wisconsin.

LARGE SILVER TIP GRIZZLY RUG, OPEN mouth, freshly killed, sell or trade from taxidermist charges. $100.00 or modern gun. Geo. Maxon, Vernon, Texas.

22-250 ACKLEY BUILT AND STOCKED. Med. H.B., Mashburn trigger, Redfield Jr. Mts. K2.5 Litschert 6X. Excellent inside and out. $235.00. Pacific Dies, 340 cases, 2000 Bullets, among which are 800 WM 8S and 800 Sisk. With the Rifle for $30.00 additional. First money order takes this. Member C. M. Merritt, 17344 Fairfield, Detroit 21, Michigan.

CASES—.30 REMINGTON FIRED ONCE—$1.50 per hundred—$12.00 per thousand. J. O. Direks, 3803 Griffith View Drive, Los Angeles 26, Calif.

WINCHESTER 52-EXCELLENT, LYMAN EXtension rear, detachable front sight—$80.00. Winchester M69-22, perfect—$18.00. Knickabocker 12 Gauge, double-barreled, excellent—$30.00. Lyman 48F rear—17A front, excellent—$10.00. Richard Berson, 161-16 G.C.P., Jamaica, New York.

NEW: M70 WINCHESTER 270, $106.00. M620 Stevens 12 ga 28" Full, $65.00. M721A Remington 270, $75.00. M219 Savage 30-30, $20.00. M151MA Mossberg 22 Auto, $27.50. M550 A Rem. 22 Auto $28.50. M88 Marlin 22 Auto $25.00. HD Hi-Standard 6" $47.50. HB Hi-Stand, 4" $37.50. Match Woodsman $75.00. 38 S&W M&P 2", $48.50. M37 Ithaca 12 ga. 30" full, $78.50. 336A Marlin 30-30 $65.00. M94 Win. 30-30. $55.00, Elgin Gates, Box C2, Needles, California. Life Member NRA.

TENTS, WAR SURPLUS, ALL SIZES; COTS, hammocks, camping equipment, canvas covers, fishing & sporting goods, rope. Morsan, 10-19J 50th Avenue, Long Island City 1, N. Y.

AMMUNITION WANTED — FACTORY loads only, in good condition. We can use almost any size or make. Will pay cash or trade. Let us know what you have, stating price or trade desired. Life Member. Philip Jay Medicus, Dept. A8, 18 Fletcher Street, New York 7, New York.

Old Shootin' Irons!

COLLECTOR OR SHOOTER, YOU'LL WANT THIS FASCINATING BIG CATALOG OF 1100 FIREARMS—FROM 16TH CENTURY WHEEL-LOCKS TO MODERN AUTOMATICS *Profusely Illustrated*··· Only $1.00 POSTPAID

JAMES E. SERVEN · Santa Ana, Calif.

AVAILABLE AT LAST

1949 folders covering Professional Re-Bluing now off the press giving pertinent data and prices. Gunsmiths & Dealers folder and discount sheet upon receipt of your Federal License number or letterhead. Can now accept a limited amount of double barrels (barrels only) and all soldered rib guns for genuine OLD FASHIONED SLOW RUST BLUING PROCESS. Write for definite information. Professional Custom Bluing.
J. A. Wingert 124 W. 2nd St., Waynesboro, Penna.

INFRA RED SNOOPERSCOPE TUBE. PERmits night time vision. Tube and complete instructions $14.95. Test filters 15¢. Precise Measurements, 942 Kings Highway, Brooklyn 23, New York.

OUR CATALOG OF EDGED WEAPONS DEscribing and pricing a museum collection of swords and daggers will be sent on receipt of fifteen cents in coin. Kimball Arms Company, Woburn, Mass.

CLOSING-OUT-BULLETS, ONCE-FIRED cases. List for stamp. Ratliff, Hillyard, Washington.

ELECTRIC PENCIL: ENGRAVES ALL Metals $1.25 postpaid. Beyer Mfg., 10511-Z Springfield, Chicago 43.

FREE TRIAL! SAVE GAS! GANE NEEDLES give Better Idling, Faster Pickup. $1.50 ea. (8's take 2) Send Make Car and Carburetor. Gane, 10-01 2nd, Fairlawn, New Jersey.

"SHOTGUNS"—"RIFLES"—"HANDARMS"—"Ammunition"—"Rods"—"Reels". List 10¢ AR Rudolph's, Atchison, Kansas.

WINCHESTER MODEL 21 DUCK 12 GA. magnum 32 inch full & full, perfect, sheeplined zipper case, 10 boxes shells, $260.00. C.O.D., James Cerf, Corsicana, Texas.

CLOSING-OUT—MY PERSONAL VARMINT Rifles. List for stamp. Ratliff, Hillyard, Washington.

RELOADS IN YOUR CASES—.38 SPECIAL Mid Range or Full Loads—$19.00 per thousand. You furnish all materials $7.00 per thousand. J. O. Dircks, 3803 Griffith View Drive, Los Angeles 26, Calif.

BENCH REST TARGETS — LATEST IMproved type. Designed by a bench rest shooter. See description by Warren Page in June 1948 Field & Stream. 100 and 200 yard targets now available. .22 caliber holes spotted easily at 200 yards. $3.00 per hundred postpaid. Thomas E. Higgins, 718 Eighth St., Irwin, Pa.

FOR SALE: AMERICAN RIFLEMAN. FEBruary 1929 to date $50.00. Frank Davis, 47 Robinson St., West Englewood, N. J.

GOOD 25 CAL. REMINGTON MODEL 8 auto loader, 2 boxes ammunition $75.00. Very good Weaver 29S scope with Edwards attachment $20.00. Excellent 6x Litschert attachment for Weaver 440 or 330 $14.00. George Gablehouse, Troutlake, Washington.

ENFIELD SPORTER 30-06 PERFECT, LYman Alaskan coated Redfield mount, beautiful walnut stock, sling, $140.00. Ithaca Field Grade, excellent, 16 gage $50.00. 75 Winchester, perfect $50.00. Noah Barger, Box 304, Carmichaels, Pa.

GUNS, REVOLVERS, AMMUNITION, ALL sizes. Mail 10¢ in coin for list. Miller's Sport Shop, Dept. R-142 N. 8th St., Phila. 7, Pa.

FINE CUSTOM MADE GUN STOCKS. Write for information. Chas. Sisson, Great Bend, N. Y.

NEW F-N ACTION, JOHNSON 270 XX Grade Flaig stock, K6 Dot Weaver $200.00. Mauser .257 Roberts Bumueller K4 Weaver $175.00. First Money order. A. T. Etzold, 701 N 9, Independence, Kansas.

PARKER VH 12 GAUGE 26 IN. CYLINDER bore, pad with spacers, very good, $90.00. Trade for High Power. Lewis Robertson, Box 384, Banning, Calif.

FREE BARGAIN LIST—USED AND ANtique Guns. Write Martin Rywell, Harriman, Tennessee.

FREE CATALOG! WAR SURPLUS CLOTHing. Men's, women's. Amazing bargains. N. Y. Clothing Co., 2079 E. Second Ave., N. Y. 29.

EXCELLENT .22/250 MAUSER, CUSTOM barrel, hi-comb. target stock, A-5 with 6-X Litschert att'mt. Reloading dies, shells, 300 Sisk 49 Gr. cost $225.00. Sell $165.00. Outfit without scope $135.00. W. L. Montgomery, Avinger, Texas.

GRIZZLY

GUN SWIVELS
$2.50 per pair
Write for Free Folder
Maxwell Mfg. Co.
107½ W. 7th St., Vancouver, Wash.

Another Forward Step to Good Shooting

Williams Offset Scope Mount on 721 Rem. with Texan scope and Williams "Foolproof" Receiver Sight.

THE *New*

Williams All-Purpose Sighting Set

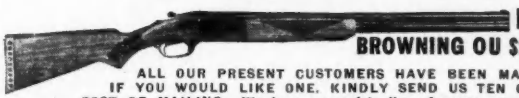
A NEW Williams OFFSET Scope Mount is mounted slightly off center . . . permitting INSTANT use of open sights or the Williams "Foolproof" Receiver Sight.

OFFSET SCOPE MOUNT
- Bridge-type for strength
- Wide ring spacing
- Light in weight
- Has positive locks, yet easily detachable
- Durable anodized finish . . . $12.50 each

"FOOLPROOF" RECEIVER SIGHT
- Internal Micrometer adjustments
- Positive locks
- Supported at OUTER end
- Approximately 1½ oz. in wt.
- Clean on top—no knobs
- Made of finest alloy—87,000 lbs. tensile strength
- Durable anodized finish . . . $9.00 ea.

Write for Literature on other Williams Top and Side Mounts
•
Life Members
Amer. Gunsmiths Guild
Nat'l Rifle Association

WILLIAMS GUN SHOP
INCORPORATED
ON THE RANGE
7387 Lapeer Rd., Davison, Mich.



MARLIN O & U $82.45
BROWNING OU $244 - WIN. MOD. 71 $91.10

ALL OUR PRESENT CUSTOMERS HAVE BEEN MAILED OUR NEW CATALOGUE. IF YOU WOULD LIKE ONE, KINDLY SEND US TEN CENTS IN STAMPS TO COVER COST OF MAILING. We have a complete line of scopes, mounts, sights, hand-guns, shot-guns, target rifles, match and regular ammunition, trap loads, clay targets, binoculars, shooting glasses & accessories. In fact, we can supply the shooter with everything but the trigger squeeze.

Marlin M80-C .22 Cal. Bolt, Clip Mag.	$ 22.30	S & W K-22, K-32, & K-38 MASTERPIECE	$ 65.00
Marlin 81-DL .25 Shot. Peep Sights	28.90	High Standard HDM, $55.00, Model GB	50.00
Winchester Model 70 National Match	157.65	Winchester Model 52 Bull Gun	116.75
H & R SHOTGUNS 12, 16, 20, 410	21.50	REMINGTON 37 RANGEMASTER	98.45

GOPHER SHOOTER'S SUPPLY *Distributor, Quality Sporting Goods* **FARIBAULT, MINN.**

ZINC ALLOY BULLETS

25 cal. $1.40; 38 S&W $1.45; 30 cal. $1.50; 8 m/m $1.70. Prices per hundred, postpaid. Trial order of 10 bullets, 25 cents, postpaid. The alloy used in these bullets is about the same hardness as copper. The melting point is the same as our KIRKSITE bullets.

WESTERN ALLOY CO. P. O. Box 643 North Hollywood, Cal.

WILSON PRODUCTS

Cartridge Case Trimmers—
.30-'06 Headspace Gages—
Cartridge Case Gages—
Inside Neck Reamers—
Primer Pocket Reamers—
Full Length Resizing Dies.
Send 6¢ in stamps for latest circulars.
L. E. WILSON
Cashmere Wash.

NOW... a famous *Dockendorff* GOLD BEAD RIFLE SIGHT WITH *Built-in Ramp*

At last you can get one of these sharp-shooting sights to fit any rampless rifle with a standard ⅜" dovetail. Look at these great advantages.

All models sold with a money-back guarantee

The Gold Bead incorporates all the sighting principles which give the best, sharpest, definition of game or target in any condition of light. Easily installed, quickly removed when 'scope is desired. For use with any adjustable rear sight, open or peep. Make this a "Happy Huntin'" season. Equip your rifle NOW with a Gold Bead Front Sight and watch your shooting improve.

DOCKENDORFF, ORONOQUE, CONN.
Please send me postpaid:
☐ RB450 Gold Bead Sights @ $5.75
Enclosed is check or M. O. for $.....
Name.....
Address.....
City..... State.....

Dockendorff & Co., Inc., Oronoque, Conn.

FREE CATALOG

Be certain to order out your copy of Catalog 39 . . . completely revised, containing hundreds of new items.

ANNOUNCING.....

★ A NEW STANDARD STOCK

Here is a stock featuring Herter's famous precision inletting, together with a complete set of fittings, including Bacite buttplate, pistol grip and forearm tip. Screws supplied for installation. The walnut in these stocks is guaranteed to be serviceable under the roughest field use. Available for Springfield, Enfield and Mauser. The finest value in the gunstock field today.... **$5.00**

★ FINEST STEEL FITTINGS

Our new steel buttplate and grip cap are masterpieces of design. We guarantee them to equal the best in the field, regardless of price, and to compare favorably with the finest hand work. Gracefully curved, Swiss knurled and blued, we offer them as optional fittings on all of our stocks in $6.50 grade or better at no increase in price over the basic price of the stock, as regularly advertised in our catalog 39.

FINISHED STOCKS

SPRINGFIELD — ENFIELD — MAUSER

These stocks are completely ready for use in the field and are absolutely guaranteed to be the finest available in the price range which they represent. Available with or without Monte Carlo comb and with a cheekpiece for a right hand shooter. For stock fitted with forearm tip, add $1.25. For ivory or black spacer plates installed, add 50¢, each. Add $3.00 for fitting stocks to actions with conversion barrels of standard sporter dimensions or smaller. Enfield stocks are designed for the straightened floor plate, with or without modified bolt; on Mauser stocks, specify whether battle sight sleeve has been removed.

$24.50 Postpaid

DUPLICATING:

If you have a rare military rifle for which semi-inletted stocks are generally unavailable or if you have a stock on your rifle which you would like to have duplicated for a matched set, we can handle this work for you. In duplicating the work on military rifles, we inlet the blank and leave the outside shaping to sporter dimensions to be done by you. However, on sporter stocks, we can duplicate them both for inletting and shaping.

If you are a small producer of custom built rifles, we can afford you the savings of factory production methods on semi-inletted stocks to your patterns.

WRITE FOR QUOTATIONS ON ALL DUPLICATING

FANCY BLANKS

For Fine Custom Work

The largest stock of plain and fancy blanks available in America today is available at Herter's. All blanks are dried down to a moisture content of 7% or less and vary in price with the beauty of the grain. AMERICAN WALNUT SPORTER LENGTH BLANKS: Six price ranges from $2.75 through $25.00. AMERICAN WALNUT MANNLICHER LENGTH BLANKS: Field and custom grade, only, $5.00 and $9.50; FRENCH WALNUT SPORTER LENGTH BLANKS: Four price ranges from $7.00 through $40.00. CURLEY MAPLE SPORTER BLANKS: $16.00 and $30.00. MYRTLEWOOD BLANKS, SPORTER LENGTH: $10.00, $18.50, $23.50. SHOTGUN STOCK BLANKS: Five price ranges from $1.00 through $7.50. SHOTGUN FOREARM BLANKS: Five price ranges from 40¢ through $1.75.

WRITE TODAY FOR FREE CATALOG 39

HERTER'S

WASECA, MINNESOTA, U. S. A.

WALNUT STOCKS OF EXCELLENT QUALITY

PRECISION MACHINE INLETTED
SATISFACTION GUARANTEED

Enfield, Krag, Springfield, Mauser, Short Action Mausers, Winchester M70, Jap 25 and 31 calibers, Remington M721 and 722, Win. K43. Any Grade Walnut Regular or Monte Carlo models with or without cheek rest. We guarantee our precision machine inletting is the most accurate in America. Using regular household tools, an amateur can bed an action in less than 3½ hours; an expert 1½ hours. Exclusive time-proved designs created by expert gunsmiths.

$6.50 POSTPAID

With knurled Bacite butt plate, pistol grip plate and forearm tip unattached and with screws furnished. Butt plate, pistol grip plate and forearm tip available in black, ivory or mottled walnut. Steel butt plate, grip cap optional.

Stocks machine sanded and with Bacite butt plate and pistol grip plates attached $7.50. Add 75¢ for attaching forearm tip. Ivory or black spacer plates installed between stock and butt plate, pistol grip plate and forearm tip. Add $1.50. Add $7.00 for stock completely hand inletted so that rifle will drop right into place.

FANCY WALNUT STOCKS—Custom grade $11.45; Demi-Deluxe grade $15.00; Deluxe grade $20.95; Grand Deluxe and Grand Fiddleback grades $35.00 . . . all precision inletted, machine sanded, with butt plate and pistol grip cap installed. Write for quotations on stocks in curly maple and myrtlewood. Mannlicher type stocks for Mauser, Springfield, Enfield $11.50.

A. H. BARR Says;

(NRA Technical Division)

"I think you are doing a fine inletting job and I know a lot of stock makers who are using these blanks."

ABOUT OUR HAND INLETTING

"Naturally, I took the gun apart and inspected the inletting very carefully and . . . it is a very nice job. I like the close hand fitting and as long as you can turn out that kind of work I think you can get plenty of recommendations.

On All of Our Products & Stocks, We Back Such Approval with Our Guarantees.

CHRISTY BAND & CATERPILLAR RAMPS

CHRISTY BAND & CATERPILLAR RAMPS

are milled from solid stock and reamed to fit standard barrel taper. The hoods are machined from seamless tubing and are a good snug fit. Standard band sizes are .575, .600, .620, .640. Special sizes on order at additional charge. Three heights, ¼", ⅜", and ½" in both band and caterpillar ramps. Add 3/16" for "gold" bead. The gold beads furnished with these ramps are a solid welded bead. Compare the features of our ramp with any other, then compare the price. Band ramp complete $6.00; Caterpillar ramp complete $4.00. Regular dealer discounts. Order from your Gunsmith or Dealer, or direct from

CHRISTY GUN WORKS • 875 57th St., Sacramento 16, Calif.

SCOPES!

We specialize in scopes and scope mounting. Cutts Compensators, Weaver and Pachmayr chokes installed. EVERYTHING for the Shooter. Write us your wants. We have a full line of rifle and shotgun shooters' supplies.

MAU-JONES SPORTING GOODS

112 East Broadway • Missoula, Mont.

OUTBOARD MOTORS: CLOSING OUT NEW and used models, all brands and sizes, sold with new motor guarantee, $25.00 to $100.00. Elgin Gates, Box C2, Needles, Calif. Life Member NRA.

.45 AUTO-TARGET. 2 CLIPS 175 RDS. target ammo. Lamping accuracy job. Adjustable rear Newley blued better than new in and out. $85.00. C. W. Eilermann, Campus Station, Cincinnati 21, Ohio.

NEW ENFIELD .300 MAGNUM 8 GROOVE match barrel Vaver Receiver Rear, Ventilated Front Ramp Beautiful fiddle back Maple stock etc. $150.00. New 63 Winch. .22 cal with Rec. rear, Terhaar Front Ramp $60.00. Fred W. Remynse, 6425 Cross Ave., Jacksonville, Fla.

CLOSING OUT 20 COLT OP 38 SPL. 6 INCH, 25 Colt OP 38 Spl. 5 inch 25 Colt OP 38 Spl. 4 inch 6 Colt FP 38 NP 4 inch all new $55.00 each. Hurry. Cash with order. Aim and Fire Sports Center Inc., 26 Northwest First Ave., Miami, Fla.

SUNGLASSES—NEW! SURPLUS, MADE for U.S. Navy. Green, ground glass. With case, $1.10 each, 5 for $5.00 postpaid. Life Member Philip Jay Medicus, Dept. A 8, 18 Fletcher Street, New York 7, New York.

NEW LIST OF MUZZLE LOADING RIFLES. Also cap and ball revolvers for shooting. 3¢ stamp please. Kimball Arms Company, Woburn, Mass.

BULLETS: 38 SPECIAL 146 GRAIN WADcutter, 158 grain conical, sized, and lubricated to .358—$9.00 a 1,000. 45 A.C.P. 200 grain semi wadcutter sized, and lubricated $11.00 a 1,000. A. Cutillo, 1-19 Hartley Place, Fairlawn, New Jersey.

COLT 38 SPECIAL O.M.—H.B. KING FULL Rib, Short Action, honed, Perfect $115.00. 45 ACP King Semi-Rib accuratized Bob Chow,—very good $75.00. Colonel A. M. Libasci, 12th & Spruce Sts., St. Louis, Missouri.

NEW GUNS IMMEDIATE DELIVERY—Now. Remington #721—30/06, 270 calibres $79.95. Remington 721—300 Magnum recoil pad $89.95. Remington 722—300 Savage, 257 Roberts $74.95. Remington 81 Automatic Rifle 30, 35 or 300 calibres $129.95. Remington #141 pump action rifle 30, 32 or 35 $104.95. Winchester 94 Lever carbine 30-30 and 32 special $62.45. Winchester 64 lever action rifle 30-30 and 32 special $82.95. Winchester 64 Super Grade 30-30, 32 Special $97.75. Winchester #71 lever action 348 calibre $91.10. Winchester 71 DeLuxe grade 348 $105.00. Winchester #70 bolt action, .22 Hornet, 270, 30-06, 257 Roberts, 250 Savage $109.50. Winchester #70 Super Grade 22 Hornet, 270, 30-06 257 Roberts, 250 Savage $162.50. Savage 99EG 250-3000 or 300 Savage $96.45. Marlin 336—full or ⅔ magazine carbine $61.45. Postpaid Insured. Send Money Order or Check. Discounts to dealers. Write for free list. Mann's Sporting Goods Co., 100 Genesee Street, Utica, N. Y.

WIN. M71 348 STANDARD NEAR PERFECT except stock, 110 rds. ammo $95.00. Member Kenneth F. Clausen, Route 1, Bozeman, Mont.

OLD CATALOGS AND ARMS BOOKS FOR sale. Send for list and Arms Information card. Hugh Smiley, Henniker 10, N. H.

FORMED, FLUTED AND HARDENED chambering reamers; ready to hone: standard calibers $7.00, wildcats to your specf. $9.00. Elwyn Sprague, 422 North St., Otsego, Michigan.

INVENTORS: HUNDREDS OF MANUFACturers have requested our assistance in locating marketable new products. Complete information, free. Institute of American Inventors, Dept. 131, 1926 Eye St., N.W., Washington 6, D. C.

KEEP GOING—NUMRICH ARMS COMPANY specials just ahead.

EXPERT GUN REPAIRING Company

Complete gunsmith service. Barrels, Conversions. Fine rifle and shotgun stocks, Sporters, Flat Springs. Quality workmanship, Bluing, Plating, Checkering. Price lists sent on request. We trade work or guns. P.O. Box 113. ST. MATTHEWS, KENTUCKY

GUNSMITH SUPPLIES

Barrel Blanks: Blueing-Tanks, Band Ramp Front Sights & Blades, Chambering Reamers & Gauges, Inletting & Checkering Tools & Rasps, Gunsmiths Special Taps & Dies, Buffing and Polishing Wheels, Compounds.

DRIVER EQUIPMENT CO.

1152 Valencia Str., San Francisco 10, Calif.
Manufacturers, Distributors, Gunsmiths' Supplies.

ATTENTION GUN COLLECTORS! RARE Sjogren automatic shotgun, one of limited model—Swedish Manufacture—Shoots American 12 gauge shells—good trap gun in excellent condition. L. H. Moore, 335 Wolf St., Oxnard, Calif.

PRIMED BRASS: SHELL SHOP, 3709 SUNset Blvd., Los Angeles, Calif. Catalog 50¢.

B. & L. 7x35 C.F. BINOCULARS. EXCELlent. $75.00. Stevens 16 ga. double bbl. shot-gun. Excellent. $40.00. W. J. Curry, R.D. 2, Duncansville, Pa.

NEW GUNS! MARLIN 336C 30/30 $61.45, Savage 325 30/30 Repeater $42.95. Stevens 87, .22 auto. $29.95, Ithaca 37 Pump $83.50. Free money-saving Catalog Guns and Sporting Goods! Woodland Sports, Box A-468, Woodland Hills, California.

ESTABLISHED, PROFITABLE, GUN (AND antique) shop on U.S. 60-70-80 in fast-growing Phoenix: $7,000.00. Long lease, living quarters included, $150.00. K. T. Palmer, 1354 E. Van Buren, Phoenix, Arizona.

ENFIELD (NEW) 1917 30/30 SPORTER, Herter stock, K .4 scope $115.00. Remington Model 31, 12 Ga., Skeet, White Line Pad, Excellent $80.00, Remington Model 11, 12 Ga. good to V.G. except cracked forepiece $40.00. Emory Evans, Westminster, Md.

WIN. M. 12, 16 GA. FULL, NEW, $75.00. Hamilton Watch, 17 Jewel, Perfect Cond., $5.00. Dr. Edgel W. Wiley, 145 E. Chestnut Street, Lancaster, Penna.

MOD. 70 SUPER GRADE 375 MAGNUM perfect inside & out, Lyman WJS Receiver Sight Engine turned bolt & extractor, polish bolt handle, doubl. leaf fold. sights $180.00. 405 Winchester Mod. 95 perfect inside & out $100.00. Mod. 64 30-30 Winchester Deluxe, good condition, Star Gauge, very accurate $80.00. Send check or money order payable to William Carl Hoffend, 235 Mohawk St., Rochester 5, New York.

OUR LIST OF MODERN ARMS WILL BE sent on receipt of three cent stamp. Kimball Arms Company, Woburn, Mass.

---

1 REMINGTON 513T NEW IN FACTORY Carton $48.50. R. B. Watkins Jr., 2513—Jeff. Ave, Newport News, Va.

BULLETS REMINGTON .22 HORNET 45 grain soft point, $2.25 per 100; Remington .25-20 60 grain hollow point, $2.50 per 100; Remington .32-20 80 grain hollow point, 100 grain soft point, $2.75 per 100. Hi-Precision .30-06 soft point spitzer 150 grain, $4.20 per 100, 180 grain, $4.30 per 100. Hi-Precision .30-06 125 grain hollow point, $4.00 per 100. Postage 15¢ per 100 bullets. Stamp for reloading supplies catalogue. W. Joseph O'Connor, Baker, Oregon.

NEW GUNS, IMMEDIATE DELIVERY, PARcel Post Prepaid. Remington 11-48 or Sportsman 12-16 or 20 $99.95. Remington 721 30/06 or 270 $79.95. Remington 722 300 $74.95. Remington 141 35 $104.95. Marlin 30/30 Carbine or Spts. carbine $61.45, Mauser 30/06 or 270 $175.00. Savage 99—250/3000—$96.45. Winchester 70 30/06 or 270 $109.50. Winchester 94 30/30 or 32 Spec. $62.45. Stevens 325 30/30 $42.95. Harolds Sports Outlet, 17 College St., Clinton, N. Y.

W-54 K HORNET, ALTERED BOLT HANDLE and safety, 330 scope, Stith Mount, very good to excellent, full length resizer, 65 cartridges, 400 45 gr. bullets, 75 cases, 300 primers. $145.00. C. A. Faulkner, Kenton, Ohio.

INVENTORS—PATENT LAWS ENCOURAGE the development of inventions. Our firm is registered to practice before the U.S. Patent Office. Write for further particulars as to patent protection and procedure and "Invention Record" form at once. No obligation. McMorrow, Berman & Davidson, Registered Patent Attorneys, 2513 Victor Building, Washington 1, D. C.

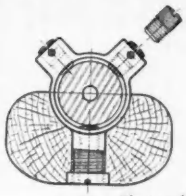
CUSTOM MADE PISTOL STOCKS!!!

To your own specifications. Name your gun when requesting folder and patterns.

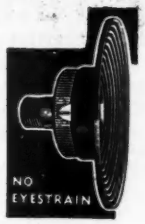
LEW SANDERSON & SONS

3075 North Hickory Ridge Rd. Milford, Michigan

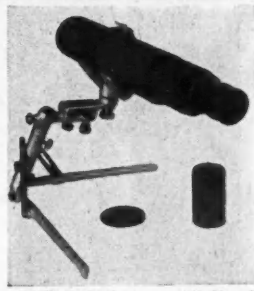
For The Shooter By A Shooter



Electronic Bedder



Merit Master Disc



FREELAND Custom 400 Bipod

FREELAND Shooting Glove

FREELAND Sling Keeper

FREELAND Shooting Mat

Freeland Custom 400 Bipod	$ 16.50
Freeland Olympic Friction Head Bipod	15.00
Freeland All Angle tripod (mention scope when ordering) All equipped with Pat. Clamping ring.	11.50
Freeland Very Fine Glove	3.75
Freeland Sling Keeper	1.00
Freeland SHOOTING MATS	$14.50 17.50
Freeland Shooting Jerseys, double elbows	2.95

Freeland Cartridge Blocks:

Timer Block $10.00, 50 hole $1.50, Dewar type	2.00
LOADING BLOCKS, .22, .38, .30-06 & .45 ea.	1.00
RIG EZE SCORER .22, .38 & .45 cal. ea.	2.00
FREELAND SPRING TENSION BARREL BAND, mention gun	5.00
FREELAND LENS ADAPTER, takes 1/8" Lens, mention sight	9.75
10X RIFLE COATS $15.00, Pistol coat $11.00, Glove	4.00
Croft Rifle Coats $10.50 &	12.50
WEAVER SCOPES K2.5 37.50, K4 $45, J2.5 $22.50, J4 $27.50, G4 $9.75, G6	12.50
Weaver Q.D. Mounts $9.75, U Mount $6.25, Q Mount $5.75, N Mount	2.00
Unerti Varmint Mounts $16.00, Target	19.50
Echo Mounts $12.50 to	17.50
Pachmayr Mounts $20.00, G&H	19.50

Scopes:

Mark 245 84.50, 218	22.50
Saturn $25.00, Mossberg Spotshot	24.90
ARGUS SUPER GRADE	74.50
B&L SHOOTING GLASSES $13.75, yellow	14.75
STANBLOCK plastic cart. holder	1.00
HOLSTER RUGS, mention gun & bbl.	5.00
CARVED GUN RACKS, 3 gun $8.10, 4 gun $8.10 &	9.00
ELECTRONIC BEDDER, mention gun	15.00
Lyman 17 A site $3, Model 77 $5.00, 48 sight $12.50 up, 524 and 525	15.50
Bradley shotgun sights	1.00
MERIT MASTER DISC	4.75
Merit Lens Master Disc	6.75
TRIPAK CLEANING RODS $1.50	1.25
Marble cleaning rods $1.25	$ 1.50
Parker Hale cleaning rods $1.25	2.25
Parker Pistol Rods $1.00 &	1.50
EAR STOPPLES, pr. 50¢ and	1.00
Mershon Butt plates	2.00
Sheepwool glove $1.50 &	2.40
Sierra Bullets $2.25 and	2.75
Pacific Reloading tool	31.50
Ideal Tru Line Jr. Reloader	22.00
Redding Powder Scale	11.95
Saeco Powder Measure	14.50
Pacific Powder Scale	8.50
BIG HEAD SAFETY, Model 12	2.95
CUTTS COMP	14.85
Eads Safety $5.00. HAND TRAPS $2.95	3.95

GUNS

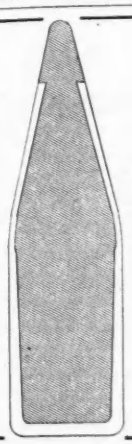
Marlin 88C, .22 Auto	32.50
Marlin 90DT O&U 12 Ga.	82.45
L. C. Smith, Ideal Grade $137.15, Field $98.95, Crown	514.45
HyScore Air Pistols $18.95, $19.85 &	24.95
Crossman Town and Country & the Gas Gun	24.95
Win. Mod. 70 Stand. grade 257, 270, 30-06, 220 S. 22 H	109.50
Win. 94 Lever Action 30.30 & 32 Spec.	62.45
Win. Model 63 Auto .22 $63.50, G7402 .22 Auto	33.95
Win. Model 43 218 Bee & H.	54.95
Win. 52 Bull Gun $116.75, Mod. 75 57.00, 52 HB	96.85
Remington 721 A Std 30-06 & 270	79.95
Remington 521TL $36.95, 513TR $57, 37AR	118.60
Belgian Browning, O&U 12 & 20 Ga.	108.80
Model 12 Trap Grade $190.00, Pigeon Grade	235.00
Model 12 Field Grade, all gauges & chokes	83.50
Marlin 336 DeLuxe 30-30 or 32 Spec	87.50

High Standard:

G 380 HDM & GB	55.00
GE $48.00 & HB	42.00
CZ 25 Cal. Auto	39.50
Smith and Wesson:	
K22, K32, K38	65.00
38/44 Heavy Duty $64.00, M&P	56.00
COLT:	
O.P. PP, .45 Govt. Auto & Det Spec	65.00
Colt OMT $75.00, OMTW	$85.00

See us for all your target, hunting and sports needs. 25¢ for Catalogue. DEALERS ORDERS INVITED. Courtesy assured, CLUBS GET PRICES ON CASE LOTS OF AMMO, PRIMERS AND OFFICIAL TARGETS.

AL FREELAND 3737 14th Ave., Rock Island, Ill.



HORNADY BULLETS

Bullets designed for their intended use. Jackets tough enough to be driven at highest possible velocities and still expand readily on game. Uniformly manufactured in weight, form and finish for finest accuracy.

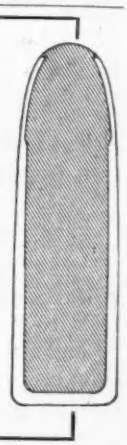
.30 caliber 180 gr. round nose (cannelured or plain)	$4.75
.30 caliber 180 grain spire point	4.75
.30 caliber 150 grain spire point	4.50
.30 caliber 110 grain spire point	4.25
.30-30 caliber 170 grain flat point (cannelured)	4.75
.270 caliber 130 grain spire point	4.50
.270 caliber 100 grain spire point	4.25
.257 caliber 100 grain spire point	4.00

Primers, Powder, Primed cases, Tools and accessories

Send for list

J. W. HORNADY

324 West Fourth Street • Grand Island, Nebr.



Protect and Display Your RODS *and* GUNS

in this beautiful "Early American" rod and gun cabinet, hand-made by our expert craftsmen from the finest kiln-dried knotty pine. Finish hand-rubbed to a mellow honey tone.

As many as 4 rods — overall length 70"; 5 guns — overall length 50", and 2 pistols can be protected and displayed in this handsome cabinet. The overall height is 74", width 47", and depth 17". Three drawers and two cupboards in base provide storage space for fishing equipment, ammunition, etc. Forged iron hinges. Locks on glass doors, both cupboard doors and large center drawer provide the safety you desire. Gun butt and gun barrel cutouts fitted with best quality, all-wool felt. The upper compartment can be separated from the base for easy moving.

Knotty Pine Cabinet *(as illustrated)* $165.00
Same Cabinet in Walnut $275.00

Same cabinet without rod space, with cutouts for 6, 8 or 10 guns.

Knotty Pine $150.00 Walnut . . $250.00
(All prices are f.o.b. our factory at Aurora, Missouri, and are subject to change without notice.)
(We pay shipping charges when check accompanies order)

We build Cabinets to Individual Specifications

The Perfect Gift for Sportsmen

Order NOW for Early Delivery

HOWARD BARNHOUSE COMPANY
AUSTIN 4, TEXAS

Dealer Inquiries Invited

Advanced Design

Improved features in optical and mechanical design make a Hensoldt scope your logical choice. 5 models of 2¾ to 8 power. Coated lenses. Compact, weather-proof construction. Choice of tapered or cross-wire reticules.

Ask your dealer also to show you Hensoldt Binoculars. 9 models, from 6 to 16 power.

Write for Literature

Carl Zeiss, Inc., Dept. Z-5, 485 5th Ave., New York 17

NORMA--
Europe's Finest

Announces Big Pre-Hunting
SALE ON AMMUNITION

6.5 Mann.-Sch. 156 Gr. SN 20	$4.65
8x57 Mauser 159 Gr. SN 20	3.20
8x57 heavy Mauser 196 Gr. SN	3.25
8x57JR Rimmed Mauser SN 196 Gr. 20	5.80
6.5x55 Mauser metal-point Spitzer	4.30
6.5x55 Norman SN Ctgs. 156 Gr. for Jap rifles	4.30
8mm Danish Krag SN Rim Ctgs. 196 Gr. 20	4.95
9.3x62 Norma Custom Mauser SN 285 Gr. 20	5.50
9.3x72R Mauser SN 201 Gr. 20	8.80
9.3x74R Mag. Mauser Rim SN 285 Gr. 20	8.80

• BULLETS •

30.06 Super Match Target Spitzer 100	4.95
6.5mm SN mics. .264 Mann. style 156 Gr. 100	4.35
6.5mm M.P. Spitzer .264 139 Gr. 100	4.90
7mm SN mics. .2825 150 Gr. per 100	4.35
7mm New design Spitzer SN 156 Gr. 100	4.90
8mm 159 Gr. SN (.318) op. Jack. 100	4.60
8mm 196 Gr. SN (.318) 100	4.60
9mm 116 Gr. M.P. mics. (.3545) per 100	3.90
9.3mm Custom 285 Gr. SN Mauser 100	5.20
30.06 Norma 180 Gr. M.P. 100	4.95

All Cartridges non-mercuric, non-corrosive, all factory loaded. Forward check, money order, immediate shipment DEALER'S DISCOUNTS.

ASHTON & CO.
U. S. Agents, A/B Norma, Sweden, Norway
1511 No. Gardner St., Dept. A, Hollywood, Calif.

NEW! Shell Pouch for Riflemen

Easy one hand operation

PULL IT OPEN! PUSH IT SHUT!

Martin Bullet Pouch

Heavy horsehide pouch, four by six inches. Patented overlocking steel opening that stays open and stays closed. Loop fastens securely to belt. No zippers, buttons or clasps. Cartridges always within easy reach. Holds 200 .22 cart. or 20 H. P. cart. Postpaid anywhere in U. S. for $3.00 each. Send check or money order today. No C.O.D.'s please.

Woodcraft Sports Store
905 West Lake Street, Minneapolis 8, Minn.

FREE SOUTH BEND CATALOGS

Cat. 100 — 9" to 16" LATHES
Cat. 400 — 14" DRILL PRESS
Cat. 500 — 7" BENCH SHAPER
Cat. 77 — ATTACHMENTS
Write today — state catalog

South Bend Lathe Works
452 H E. Madison St., South Bend 22, Ind.

---

160 MISCELLANEOUS COPIES RIFLEMAN, 1928 through 1948. $30.00. Raymond Orr, 928 N. Grant, Chanute, Kansas.

CUSTOM SPRINGFIELD 30-06, JOHNSON Automatics, Fancy walnut cheek piece stock, Lyman receiver, ramp front sights, excellent plus; price $135.00. Colt's Percussion revolving rifle, Model 1855 Army pattern, Cal. 56-5 shot. All parts original, condition good, $125.00. Mannlicher Schoenauer Sporter, Model 1908 Carbine Cal. 7.9 x 56 M.M. Very good $110.00. Richmond Gun Shop, 517 East Main St., Richmond, Va.

NEW MODEL REMINGTON 31TC VENtilated rib 30" full, with $15.00 case—both perfect, never used—$175.00. George Mock, 296 E. Washington, Sunnyvale, California.

NEW GUNS IMMEDIATE DELIVERY—Now. Remington Automatic Shotguns 11 '48 or Sportsman '48 12, 16 and 20 gauges $99.95. Belgian Browning 12 or 16 gauge automatic $108.80. Belgian Browning light 12 or Sweet 16 $124.50. Winchester #12 pump shotgun 12-16-20 gauge $84.95. Ithaca, Featherlight pump shotgun 12-16-20 gauge $83.50. Postpaid. Send Money Order or Check. Write for free list. Mann's Sporting Goods Company, 100 Genesee Street, Utica, N. Y.

GUN RACKS, SOLID WALNUT, NEW, TO hold 4 guns, handsomely made, $6.95. For 6 guns, $9.95. 4th Annual Gun Digest $1.50. Send money order. Public Sport Shops, 11 S. 16th Street, Philadelphia 2, Pa.

O/U 16 GA. 8x57 KRUP SHOTGUN RIFLE, 4X Zeilviever scope $165.00. Will trade. Ammo. Farmers and Traders Exchange, Chittenango, N. Y.

CONVENTION VISITORS PLAN YOUR Colorado elk hunt now. Write Copper Ridge Ranch, Steamboat Springs.

NEW BROWNING OVER-UNDER SHOTguns 12 or 20 ga. 26.5, 28" SSTAE, Raised rib $219.00. Ventilated ribs later. 12 ga. Shotgun shells #10 shot $45.00 per case. Jeff. Trader, Pocomoke City, Maryland.

ANTIQUE FIREARMS. SEND LARGE stamped envelope for list. Charles W. Moore, 12 Franklin Street, Delhi, N. Y.

SAVAGE 99-EG — 300 OR 250-3000, $87.50. Colt Woodsman Sport, $55.00. Target Model $64.00. Match Target Model, $78.50. K22, $59.50. Colt 38 officers model Target, $68.50. Colt Super 38 or 45 Automatic $59.50. All above brand new. Arthur Forrer, Griffin, Ga.

22 MASTERPIECE, EXCELLENT PLUS, $45.00. Inspection allowed. J. D. Creech, Travellers Rest, Ky.

.38 SPECIAL HOLLOW POINT OR FULL patch cartridges $2.20 per box, 110 or 148 grain wadcutters (.38 spl.) $2.00 per box (50), 30-06 small game loads 2½¢ each in your cases, handloaded. Lloyd Olson, 500 West Cedar Street, St. Charles, Illinois.

FINE CAST BULLETS, POPULAR CALIbers. Sized and lubricated, hollow points a specialty. Large list. R. W. MacWilliams, 520 High St., Clinton, Mass.

3 BARREL GERMAN COMBINATION 16 GA. 7.7 mm side safety, good condition in & out, beautifully engraved $118.00. Single barrel German flare pistol, fair $8.00. Double barrel German flare pistol, good $15.00. Arabian Flintlock, gold & silver inlay $38.00. Belgium Whale gun, mfg. 1866, 61" overall ¾" bore, very unique type percussion $60.00. New Bedford Whale gun 8 ga., $35.00. Spencer Repeating Rifle, rim fire, good condition $19.00. Single shot Sharps Rifle, Pat. 1848 condition fair out, good in. $24.00. R. W. Meininger, Doylestown, Pa.

70 WINCHESTER 270, NEW, NEVER HAS been unpacked. $115.00. Money Order. Box 576, Phone 465, Dyersburg, Tennessee.

FOR SALE — SPRINGFIELD SPORTER, Weaver K2.5 scope, $115.00. 300 Magnum, Enfield action, Buhmiller heavy barrel, $100.00. Latest Winchester 52 H.B. Lyman sights, $90.00. Hugh Gray, 71 Greenwood Ave., Wheeling, W. Va.

AMMUNITION - BULLETS
AMMO—AMERICAN—GERMAN—JAP
BULLETS—BARNES—SIERRA
STAMP FOR LISTS
G. BJORNSTAD • 1626 Fargo Ave. Chicago 26, Ill.

$99 knocked down

LUCIFER ELECTRIC FURNACES with automatic electric controls, for heat treatment of all metals. Do your own hardening—tempering—case hardening—annealing, etc. Operates for as low as 1½¢ per hour. Model 7051 illustrated—muffle size 6"x6"x6"—price $155.25. Others up to 12"x12"x24".

WRITE FOR LITERATURE

GILBERT S. SIMONSKI, MFR. Dept. A.R.—401 N. Broad St., Philadelphia 8, Pa.

SHARPS 50-70 CARBINE, GOOD, $25.00; Walther P.P. 32 automatic, perfect in, $33.00; lead shot #6 & 7½, 5# $1.60. Following brand new: Stevens 30-30, $38.00; Ithaca #37 Featherweight 12-28" full, $75.00; Remington Sportsman 11A-48 16 ga. 28" full $90.95; Remington 11A-48 20 ga. 26" modified, $90.95: Colt Commando 38, $38.50: Match Target Colt $77.00; S & W K-38 $60.00. Hanscom & Co., Fairfield, Maine.

REMINGTON WOODSMASTER MODEL 81A, 30, 35 or 300 Savage $117.50. Remington Gamemaster model 141, 30 or 35 cal. $97.50. Remington 241, 22 automatic $57.50, Remington 22 model 121 Fieldmaster Pump $46.50, model 721 A—30-06 or 270, $74.50, Model 722A, 300, $69.50. Model 11 Remington Automatic 12 or 16 ga. Shotguns 26 Imp. Cyl., $89.50. All brand new factory boxes, Arthur Forrer, Griffin, Ga.

---

12 GA. F & M GREENER, MODEL F, EXCEL. in, good plus out. $95.00. Will trade. Farmers and Traders Exchange, Chittenango, N. Y.

DEALERS: REMINGTON BULLETS AND primers available. Order your 30 caliber bronze points and other sizes from the Williams Gun Shop, 7387 Lapeer Road, Davison, Michigan.

INVENTORS—PATENT LAWS ENCOURAGE the development of inventions. Our firm is registered to practice before the U. S. Patent Office. Write for further particulars as to patent protection and procedure and "Invention Record" form at once. No obligation. McMorrow, Berman & Davidson, Registered Patent Attorneys, 2515 Victor Building, Washington 1, D. C.

SPRINGFIELD STOCKS M1903A1, SEMI-pistol grip, new, $1.90 ea., 2 for $2.90, $12.00 per doz. Garand Butt Stocks, $1.50 ea., postpaid if prepaid. R. Fassio, 467 Pennsylvania Ave., San Francisco, Calif.

CATALOG DESCRIBING OVER 5000 BARgains 40¢. Brand new 45-70 Springfield $42.50. 45-70 ammunition $2.50 box. Springfield service rifle, excellent $68.50. Stripped receivers $14.50. Good used 30-06 barrels $6.50. Krag Sporter, excellent $68.50. 303 Ross Sporter, excellent $56.50. Colt Musket 1863, never fired, $42.50. 22-32 S&W Target, excellent $45.00. 44 spec. S&W new century triplelock, excellent $88.50. 45 Colt Auto, 45 Colt 1917 and Luger, excellent $56.00. Colt Frontiers, 32-20, 38-40 and 45x4¾", very good, $88.50. 45x5½", excellent, $98.50. 45 acp 5½" SA, excellent $110.00. 38 spec. 5½" excellent $115.00. 357 Magnum 5½" excellent $135.00. Many Frontiers, automatics, Kentucky rifles, binoculars. John Smith, Rambler Ave., Runnemede, N. J.

NEW RIFLES IN FACTORY GREASE AND unopened boxes. Savage 99 E.G. Lever action 300 Savage $96.45. Winchester #94 carbine 30-30 $62.45. Winchester #43 bolt action 22 Hornet $54.95. Remington #722 bolt action 300 Savage $74.95. Please send money order or check. Rae Roosevelt, 13 Fairview Heights, Utica, N. Y.

EXCELLENT H.B. 52 AND 20X SUPER TARgetspot $165.00, Excellent model 12 Trap Ventilated $170.00. Oliver Lane, Montague, California.

PREWAR MAUSER .257, LO-BOLT, BISHOP, 29x Scope, excellent $100.00. Sharps Borchardt Imp. 218 P.G., C.P. stock $75.00. E. M. Hindsley, New Madison, Ohio.

WINCHESTER 12 TRAP, VENTILATED, good $95.00. Wesson .38 Special heavy duty 5" perfect, holster, $50.00. Duke Lamster, Pierre, S. D.

RIFLEMAN, 1930 THROUGH 1948—SEVEN issues missing. Excellent. Best offer. W. Taylor, 209 River Park Rd., Rockford, Illinois.

LUGER TRIGGER SIDE PLATES, NEW, $7.00 each. D. L. Smith, 17301 Wisconsin, Detroit, Michigan.

NEW AND USED RIFLES, SHOTGUNS, handguns. All makes, bought, sold, traded. No lists. Write your wants. Satisfaction guaranteed. Brewster's, Grafton Center, N. H.

NEW K-22 $57.00. GUNS, SCOPES, MOUNTS, etc., list free. Ted Challingsworth, Golden, Colorado.

PATENTS Without obligation, write for information on steps to take to secure a Patent.

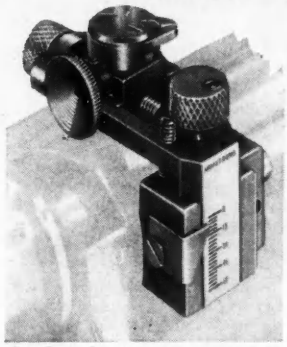
Registered Patent Attorney

JOHN N. RANDOLPH 212 Columbian Bldg., Washington 1, D. C.

ARMSTRONG *Dual-Range* SIGHTMASTER

The Finest in Micrometer Gunsights

MORE HITS - LESS GUESSWORK



An instant choice of two practical hunting ranges with a flip of the finger.

Armstrong's precision-made Sightmaster is MODERN, STREAMLINED, COMPACT, LIGHTWEIGHT—Compare some of the Sightmaster's features: Dual Range Control; Quick-Removable Staff; Adjustable Clicks; Locking Windage and Elevation; Flat-Top Gamefinder; Perfect Circle Peep.

Pat. Pend.

FOR Remington 721, 722 .....
Winchester 70 and 54 .....
All MAUSER Rifles .....
(Other models will follow)

$12.50

For free complete descriptive circular write to

ARMSTRONG GUN ACCESSORIES CORPORATION ▶ **475 FIFTH AVE. New York 17, N. Y.**

BOND DOUBLE CAVITY BULLET MOULD

ALSO NOW AVAILABLE MODEL "C" LOADING TOOLS ALLOW TWO OR THREE WEEKS FOR DELIVERY

Send 10c for latest catalog on hand loading

MODERN-BOND CORP.

813 West 5th St. Wilmington 99, Del.

OUTSIDE NECK REAMER

Of this new device Al Barr says: "The tool the exacting and discriminating shooter has been waiting for." Absolutely controlling concentricity and neck thickness, the tool can be used in the hand, or in any rotating power tool with 5/16" chuck. It delivers a perfect neck in a matter of seconds. Essential for SUPER accuracy. In stock for .22 caliber, other calibers on special order.

Price $5.75

BROWN & BALL

1206 "B" Avenue • La Grande, Oregon

GUNSMITH'S *Magic Bluer*

BLUES STEEL INSTANTLY

Bluing your gun is NOW as easy as writing your name—all without dismantling. A. H. BARR, N.R.A. technical division says: "MAGIC BLUER IS THE BEST COLD BLUE THAT I HAVE EVER TRIED AND I CAN RECOMMEND IT WITHOUT RESERVATION."

2 OZ. BOTTLE $1.00

At your dealer or direct, postage paid

A. B. HARRIS P.O. Box 505 • **Dealers wanted** Gary, Indiana

Slick Triggers

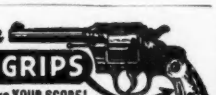
High speed action with bolt to cock on upstroke

For Enfield, Springfield, Mauser

New adjustment screw, shorter firing pin fall, faster speed action. Now only $6.00. Ship complete bolt and trigger mechanism only; two day service. Rebarreling with precision hand lapped chrome Molly barrels, proof and test fired; five day service. Delux custom stocks; 30 days. Modern conversions and alterations. Full line of scopes, sights, mounts. All unconditionally guaranteed.

M. L. Smith, Custom Guns, Bryan, Texas

New Designs in **FRANZITE GRIPS**



Modernize YOUR GUN! Improve YOUR SCORE!

Most durable grips made. Positively unbreakable! For Colt, Smith & Wesson, Hi-Standard, Ortgies, Luger and Mausers in a wide choice of beautiful designs in ivory, pearl, walnut, onyx, etc. Low prices. FREE CATALOG. Dealers Wanted.

Sports Inc. (Mfrs), 5501 Broadway, Dept. A-8, Chicago 40, Ill.

One-MAN LOADING Utili-Top BOAT CARRIER

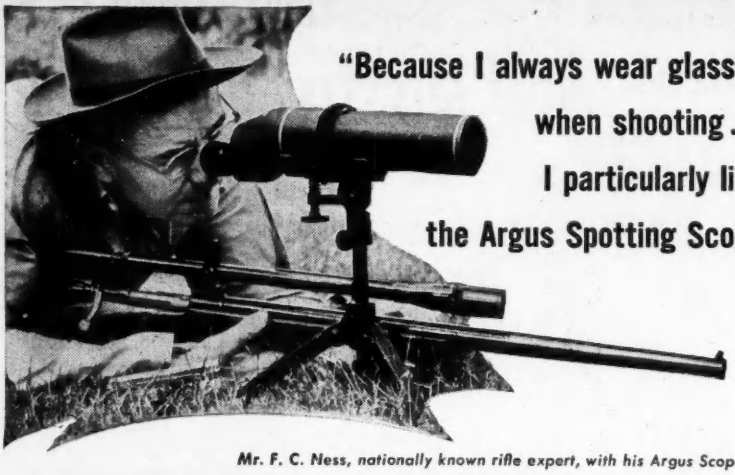
Lean boat against NEW REVOLUTIONARY ROTATIONAL ROLLER. .roll it up and swing into position with ease Carries up to 14 ft.—300 lb. boat Solidly anchored with 8 suction cups and positive rain gutter fasteners. Adjustable. Fits ALL car tops. Special attachments for skis, luggage and dunnage Finest all purpose carrier made. **Special introductory offer...**

prepaid **$12.45**

Dealers write for extra special offer

Mail coupon today!

DON BERRY, INC.
Box 24, Capitol Hill Sta., Denver, Colo.
RUSH my guaranteed *Utili-Top Carrier.*
☐ Check enclosed ☐ Ship C.O.D.
Name
Address State
City



"Because I always wear glasses when shooting... I particularly like the Argus Spotting Scope"

Mr. F. C. Ness, nationally known rifle expert, with his Argus Scope.

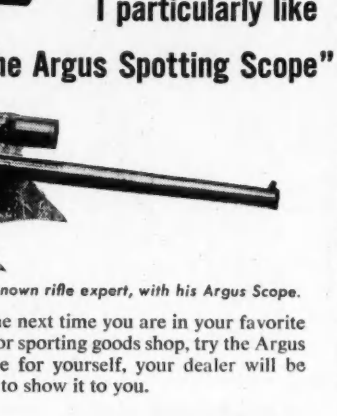
For all-around scope satisfaction, experienced riflemen recommend the Argus Spotting Scope. Mr. F. C. Ness, of Denver, says: "I have used my Argus Scope with every satisfaction. I particularly like its eyepiece design because I always wear glasses when shooting."

The next time you are in your favorite gun or sporting goods shop, try the Argus Scope for yourself, your dealer will be glad to show it to you.

Five Basic Advantages of the Argus Spotting Scope:

1. *Full 20 X magnification.*
2. *Superb image brightness—with floride-coated lens.*
3. *Quick, easy focusing.*
4. *Comfortable eyepiece, allows full use of glasses or goggles.*
5. *Light, sturdy construction (2 lbs.) easy to pack.*

FREE: Folder listing performance specifications of Argus Spotting Scope. Write:



ARGUS INCORPORATED • ANN ARBOR, MICHIGAN

In Rifle Ramps
The KING Pacemaker
Sets The Pace

Better finished . . . better looking . . . more features. For Mauser, Enfield, Springfield, Krag and custom rifles. Specify exact barrel length and make of rifle or height of ramp and muzzle diameter desired. Beads 1/16" diameter in red, white, or gold. Ramp heights 5/16"—9/16". Muzzle diameters .575, .600, .620, and .640.

KING GUN SIGHT COMPANY
667 HOWARD ST. SAN FRANCISCO 5, CALIF.

IMMEDIATE DELIVERY!
Liberal Trade Discounts

$13.50

We pre-pay cash with order. Californians, add 3% retail sales tax.

MICRO ADJUSTABLE Headspace Gauge

Works through the magazine like a shell without dismantling the gun.

$12.75 Postpaid in U.S.A.

Pat. Pend.

Its **METHOD** of use, the spring tempered **THREAD TENSIONER**, and **POSITIVE LOCKING DEVICE** makes this micrometer headspace gauge **UNIQUE**. The **FASTEST** and **EASIEST** gauge for measuring headspace. **ANYONE** can use this gauge. **GUNSMITHS**, measurements to one quarter thousandths easily made. **LONG RANGE** makes it ideal for chambering jobs. **HANDLOADERS** set your dies to **EXACT** headspace length with a **FEMCO** gauge. Made in calibers, 30.06—.270—8mm—7mm—.257—.300 Sav.—.250-3000—.22-250—.22 Swift. Send stamp for folder. Prices on quantities to **DEALERS**.

FEMCO SPECIALTY MANUFACTURING 1115 N. E. 60th Avenue Portland 13, Oregon

STOP FOOT PAINS

OR NO COST!—Try Dr. Barron's GENUINE Foot Cushions for quick foot relief! They take painful pressure off callouses, corns, sore heels, aching arches — absorb foot shocks, help support weak arches. Light, ventilated, spongy. LIKE WALKING ON A PILLOW! Wear in any shoes. Dr. Barron says: "Relieves tired, aching feet from heel to toes." Send only $1.98 for A PAIR, or C.O.D. plus postage. State shoe size and if man or woman. 30-DAY TRIAL GUARANTEE. Money back if no blessed relief!

ORTHO, Inc. 2700 BROADWAY, Dept. 1441, N.Y.C. 25

LEE'S TARGET HOLDER

- Rigid welded steel construction
- Takes 16" x 14" Official NRA 100 yd Small Bore Target
- Ground stake retracts for portability

$3.50 Postpaid

LEE SMAG 736 Douglas St., N.W. Grand Rapids 4, Mich.

BINOCULARS

BAUSCH & LOMB 6x30 U. S. Army reconditioned With new COATED OPTICS $54. $42

New 6x30 latest waterproof U. S. Navy model with coated optics as pictured, price with tax $62.

New U. S. Navy 7x50 with coated optics $93. New 7x50 Japanese with coated optics $58; New 6x24 wide field $32. All with case and straps. Prices include 2% tax. We have all makes and sizes, new and used. Write for list. Visit our store in Dallas, Texas, at 7013 Hillcrest. Write for list, and send all mail orders to us at:

LOUIS DOMINGUES 412 Water St. Kerrville, Texas

GUNS FOR SALE, REASONABLE. FREE List. Orahood Gun Shop, Ordway, Colo.

30-06 BALL AMMO. $6.00 HUNDRED, ALL new and clean. 150 grain 30 caliber bullets, machine pulled, $2.00 hundred. Once fired commercial cases for 30-06, 8mm, 270, 35 Rem., 30 Rem., anad others 2¢ each. Clean, polished, once-fired 30-06 cases 2¢ each. No C.O.D.s. Jones Boot and Saddlery, Lampasas, Texas.

ENFIELD OR SPRINGFIELD V.G.—EXC. $40.00. O&U Marlin 12 30" exc. $65.00. Voightlander variable 4½-7½X v.g. $150.00. Savage 30-06 good $65.00. Winchester 45/70's new in $40.00. Carbine $65.00. Light 24" .22 barrels $3.00. Gun list free stamp helps. D. Rios, 49 Church, Westfield, Mass.

WINCHESTER NO. 92 218 BEE, REDFIELD peep No. 70 excellent $65.00. Bill Sesler, Nenzel, Nebr.

DEALERS: THE WILLIAMS GUN SHOP IS an authorized jobber for Lyman, Redfield, Marble, Weaver, Norman-Ford, Stith, Buehler, Merson, Pachmayr, Brauer, Bradley-Grimes, Stearns, Dupont, Hercules, Redding, and nearly all other leading manufacturers of shooting equipment including Remington components and Pacific Reloading Equipment.

SPECIAL GUNSMITH SCREW DRIVERS, set of 9 spring-steel drivers ⅛" x 2" to 5/16" x 10" blades. Guaranteed not to chip gun grip handles. Shipped to any member on approval, $4.50 postpaid. E. C. Grace, Elk Rapids, Michigan.

NEW GUNS: MODEL 745 SAVAGE AUTOmatic, 12 gauge, 28" mod. $80.00. Model 22-410 Stevens $26.00. Model 511 P. Remington, Clip 22 Bolt Action $22.00. J. Reese, 517 East 14th Street, Okmulgee, Oklahoma.

REMINGTON 37AR AS NEW $80.00. REMington 513T, Weaver G4 scope excellent . . . $35.00. Winchester 75 as new . . . $27.50. Decker Bros., Inc., Mason City, Iowa.

ANOTHER GUN BARGAIN MONTH—ALL new Guns at Prices that are a steal. 1 Remington 513TR, Target grade with Redfield Sights $45.00, 1 Winchester 69, Match Rifle, Blade Front & Lyman #57 Receiver $33.00, 1 Winchester, 52 #G5256R, Front Sight Lyman 77H (8 inserts), Receiver Sight Lyman 525, $105.00, 1 Winchester 52, #G5255R, $85.00, 1 Winchester, 63, $57.00, 1 Marlin 88, $29.00, 3 Stevens, Model 416 Target Rifles, Steal 'em at $45.00, 1 Krag Converted Sporter, 30/06, with K2.5 Scope, Jeweled Bolt, A Beauty, only $100.00. Write for Parts, Accessories, and prices. Aim & Fire Sports Center, Inc., 26 N.W. 1st Avenue, Miami, Florida.

$1.50 PER 100. USED 30-06 BRASS CASES. We have plenty. Can ship at once on receipt of order. Also other size cases. Weil's Curiosity Shop, 20 So. 2nd St., Philadelphia 6, Pa.

22-250 LIGHTWEIGHT JACKRABBIT GUN. F. N. Action, 8-groove barrel, 4X Dialytan scope, Redfield mount, beautiful inlaid c.p. stock, accurate $272.00. 219 Zipper on Savage 99 action, feather grain cheek piece stock, 29S Scope excellent $93.50. New 270 or 30-06 FN. action, Rex 6-groove barrel, checkered C.P. stock, #70 rear $127.50, Photo 10c. Enfield 270 heavy target, Bishop target, Redfield mt. base, speed action, new accurate $94.50. Winchester 52, standard speed lock, Marble goss rear, #77 front, excellent $69.50. 257 lightweight Mannlicher, G-33-40 action #70 rear, new $152.50. 12 ga. Browning auto, full, good out, excellent in $68.50. 16 ga. Remington #11, full excellent $87.50. C. R. Pederson & Son, Ludington, Michigan.

NEW RIFLES! DELIVERY AT ONCE! SAVage Model 99EG Lever Action, 250-3000 or 300 Savage $96.45. Remington Model 81 Automatic Rifle, 30, 35 or 300 Savage $129.95. Winchester Model 64, Lever action, 30-30 or 32 Special $82.95. Winchester Model 70, bolt action, 30-06 $109.50. Winchester Model 94 Carbine, Lever Action 30-30 or 32 Special $62.45. Please send Money Order or Check. M. H. Mann, 100 Genesee St., Utica, N. Y.

GUNS • AMMUNITION • ACCESSORIES
SCOPES • SIGHTS • LOADING TOOLS
Liberal Trade-in Allowances
WAHL ARMS CO. • Bogota, N. J.

NOW! More Shooting Fun

with
Crosman's New $14.95
"Town & Country Jr." RIFLE

Expert or beginner—you'll like this rifle for year 'round shooting indoors and out. Accurate, hard hitting, yet safe to use anywhere thanks to Crosman's "controllable power" feature. Has rifled barrel; standard sights. Weighs only 4 lbs. 7 ozs. Available in .177 and .22 cal. single shot models at your dealer. Write for literature.

Crosman Arms Co., Inc. 29 HENRIETTA STREET ROCHESTER 7, N. Y.

REMINGTON, SPRINGFIELD, ENFIELD, Mauser sporter stocks, ready to shoot $25.00. Southworth Gun Shop, Williams, Ariz.

MONEY ORDERS ONLY: EXCELLENT 8MM Mauser Sporter $100.00. Model 94 Winchester 30-30, excellent $62.50. Excellent Krag 30-40 sporter $55.00. Two good Winchester Model 1873's, calibers 32/20 and 44/40 $25.00 each. Three new Remington Model 721's, two 30-06's, one 270 $79.00 each. Three new Marlin Model 336 carbines, two 30-30's, one 32 spl. $61.00 each. New Remington 30, Model 141 $104.00. New Service Colt 45, Factory-reconditioned $50.00. Colt 38 superauto, excellent plus $50.00. Colt 45 commercial automatic excellent $50.00. Remington 32 automatic, excellent $50.00. Royce's Gun Shop, Madison, Indiana.

COLLECTORS CORNER!! "GUN NEWS" $.25 —Choose from many fine antique and collectors' arms—of course trades. Ed. Agramonte, Harrison, N. Y.

MODEL 70, K-HORNET, EXCELLENT $90.00. Money order. Frank Farrell, Newton, N. J.

220 SWIFT DELUXE CUSTOM SPORTER Johnston bbl., Springfield action, Circassian Walnut stock, checkered, with cheek piece, Buehler Mounts, 6x weaver Scopes. Excellent. Price $225.00. T. V. Bowman, Apollo, Pa.

"GUN TRADER #2" READY. ANTIQUE, modern. Accessories, binoculars, swords. Self addressed, stamped, long envelope. Black Powder, $15.00 25 lbs. Bedford Cleaner, cleans far better; does not spoil, but improves fine stocks. $1.00 bottle. Dealers attention. Want Over unders, rare guns, foreign .22 autos. Miller Bedford, New London, Ohio.

BRAND NEW RIFLES IN UNOPENED FACtory boxes. Remington #141 pump action, 35 calibre $104.95. Remington #81 Automatic 300 Savage $129.95. Remington #721-270 $79.95. Please send money order or check. Member Louis Berkowitz, 615 Whitesboro Street, Utica, N. Y.

WIN. 52 H.B. WITH SIGHTS, FECKER 16x1½, Argus spotting scope. First $185.00 takes it. Anton Vojacek, 4816 Wendell Ave., Cleveland, Ohio.

SAVAGE MODEL 219 HORNET WITH G-4 Scope, Excellent $35.00. Sidney Lankheet, R4, Holland, Mich.

HEAVY BARRELLED JEFFRIES FAROUARson, 22 Hartung Comet. Very accurate. French Walnut stock, scope blocks, dies, 200 cases, fired very little. Excellent inside and out $190.00. Dan Fleming, Palmer, Alaska.

12 GA. SMITH PIDGEON GRADE, 30" F&F, ejectors, 1½x2 5/8x13-7/8, excellent $200.00. 12 ga. Winchester '97 trap, bore perfect $65.00. R. P. Anthonisen, 637 Powell, San Francisco, Calif.

MODEL 70 — 270 CALIBER, UNFIRED $110.00. 348 Winchester unfired $95.00. Excellent $85.00. Lester Bomyea, R.F.D. 2, Morin Grove, Erie, Mich.

"NEW RIFLES." SAVAGE M99, 250/3000 and 300, $96.45. Winchester M70, 30-06, 270, $109.50. Win. M70, 220 Swift, Lyman Alaskan, Stith Mount, $180.00. Win. M12, ribbed, Magnum Duck Gun, $109.95. "Display Samples." New, Wray English Binoculars, coated, 10x40, case, $108.00. B&L Latest Navy 7x50, coated, case, $160.00. Win. M70, 30-06, National Match, $135.00. Win. M94, 32 Special $52.00. Rem. M81, 300 Savage, $115.00. Rem. M141, 32, 35. $95.00. Win. M64 Deer Rifle, Deluxe, $80.00. Vion French Telescope, 40x, $20.00. Money Orders. M. Goldman, 972 Blue Hill Avenue, Dorchester, Massachusetts.

NEW SERVICE 38 SPECIAL, 6" BARREL fixed sights perfect $70.00. Winchester 95, 30 Army, bore rough otherwise good $45.00. E. J. Strom, 2209-W-Second St., Duluth 6, Minn.

Specialize **ANTIQUE FIREARMS**
Always a fine stock on hand. 3 to 4 lists issued annually—*send 15¢ for latest list.*
GLODE M. REQUA, Box 43, Monsey, N.Y.

10-X RIFLEMEN COATS

The Perfect Shooting Coat . . . with these outstanding features—

- **Leather loops at the top and bottom of each elbow pad for adjusting straps. If you need the elbow pad "clamped" a little tighter to your arm you can adjust to suit yourself.**
- **Patented sling pad that protects your arm from the sling, and cuts the pulse beat to a minimum.**
- **Specially designed sleeves, cut in four parts to eliminate seam at elbow and provide "True shooting position shape." Patents pending.**
- **Choice of elbow pad covers, either chrome tanned leather or Rubber No-Slip.**

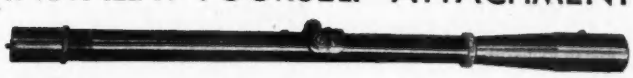
10-X RIFLEMAN GLOVE
An absolute necessity for comfortable shooting. Soft chrome tanned horsehide with quilted wool felt. Will not wad up or stiffen when moistened.

SEE YOUR DEALER
Stop in and examine the 10-X Shooting clothes. If he does not have them in stock have him order from us or write direct for catalog.

FREE 1949 CATALOG ON REQUEST
Just mail a penny postcard with your name and address printed plainly and we will forward you our complete new catalog.

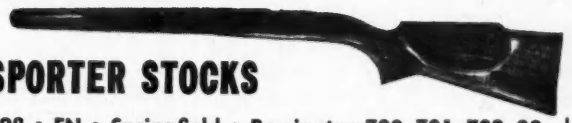
10-X MANUFACTURING CO.
305 Eleventh Street, Des Moines 5, Iowa

NEW! . . . NOW AVAILABLE . . . NEW!
INSTALL-IT-YOURSELF ATTACHMENT



⅞" SPOT SHOT attachment 8X, outside diameter 1⅛" for Weaver G4 and J. C. Higgins scopes, achromatic lens, non-rotating focusing adjustment. Just the thing for low priced scopes for varmint shooting and hunting.
Easily installed, scopes can be changed back to original power. PRICE $9.00. Leather dust caps $.75. Write for new literature on the above attachment.
Dealers write for quantity discount.
R. A. LITSCHERT, *Dept. B,* WINCHESTER, IND.

$26.50



LE FEVER SPORTER STOCKS

Enfield • Mauser 98 • FN • Springfield • Remington 720, 721, 722, 30
Plain or cheekpiece and Monte Carlo
Complete — NO FITTING — Oil Finished — CHECKERED
GUN REPAIRING — ALL MAKES
Write for dealers discount and price list.
FRANK LE FEVER & SONS, INC. • 114 E. Main Street Frankfort, N. Y.

AVAILABLE for IMMEDIATE SHIPMENT
A COMPLETE STOCK of
all commercially manufactured
AMMUNITION
at manufacturers' advertised list prices
McCLINTON-TAYLOR, 103 West Broadway
• A Gun for Every Purpose • Clarksville, Texas

INVENTORS
Patent laws encourage the development of inventions. Our firm is registered to practice before the U. S. Patent Office. Write for further particulars as to patent protection and procedure and "Invention Record" form at once. No obligation.
McMORROW, BERMAN & DAVIDSON
Registered Patent Attorneys
2514 Victor Building Washington 1, D. C.

CONVERTED ENFIELD 30/06 SPORTERS . . .

IMMEDIATE DELIVERY!

● LIMITED QUANTITY

These Rifles are the Cream of the Crop! Specially Selected!

Everyone of these rifles has been hand-picked out of thousands rejected! Expert gunsmiths gauged each barrel, checked each head space. Every action stripped, checked, cleaned and reassembled after bluing. Every rifle test fired and given fine tooth-comb inspection before leaving factory. This is your guarantee."

PRICE **$59.95** FOB NEW YORK

CHECK THESE FEATURES!

*Battle-sights and rear-lugs eliminated to form even contour on receiver so that scope-sights can readily be fitted. *Buckhorn type rear sight. *Blade front sight, 22" sighting radius. *Walnut stock, refinished. *Sling swivels. *Pistol grip. *Hand checkered. *26" five-groove barrel. *Six-shot magazine. *Weight 8¼ lbs.

"Excellent" condition, in accordance with NRA standards.

ORDER BY MAIL . . .

Cash, Check, Mail Order or COD ($10 deposit on CODs) Transportation charges Collect

BEEKMAN INDUSTRIES, INC.

420 LEXINGTON AVENUE ● NEW YORK 17, N. Y.

SHOOTING EQUIPMENT

Mossberg Spotshot Scope, 20X	$ 24.90
Davidson M218 Scope, 22x	22.50
Argus Super Spotting Scope, 20X	74.50
Davidson 45° M245 Prismatic Scope 63mm 10, 20, 30 or 40X	84.50
Davidson 245 Scope Stand	15.75
Argus Scope Stand, black	8.50
Unertl Scope, 1½", 16X or 20X	90.00
Super Targetspot, 15X or 20X	90.00
Win. 52 Standard, Marksman 1A stock, no sights	86.35
With Lyman 48F, 17A	101.90
With Redfield Olympic and 63	111.95
Win. 52 HB, no sights	96.85
Win. 52 HB, Redfield Olympic	131.25
Win. 52 HB, Vaver sights	127.25
Win. 52 HB, Lyman 77H, 525	119.50
Win. 70 Bull Gun, .300 Mag	194.85
Win. 70 Natl. Match, .30-06	157.65
Rem. .37 Match Rifle, Rem. rear, Redfield front, sling	118.60
10-X Imperial Shooting Coat	15.00
New G.I. Sling, 1¼"	1.75
Fair Used GI Sling 1¼"	.45
Rem. Palma Kleanbore & Target-master, Peters Dewar & Police Match, Western Super Match, Win. EZXS Staynless .22 L. R. Match Ammunition, 1,000	13.50
Regular .22 L.R. Cartridges, 1,000	10.95
Special case price on .22 ammunition to Club Secretaries.	
Western Primed Cases, .220 Swift, .257, .300 Sav., 100	7.80
.270, .30-06, 100	8.20
Primers, Remington, Western, Winchester, all sizes, 1,000	6.75
Powder—DuPont 4198, 4227, 3031, 4320, 4064, 4350, lb	2.00
4759, Pistol #6, ½ lb.	1.30
Hercules 2400, Hivel #2, lb.	2.00
Unique, Bullseye, ½ lb.	1.30

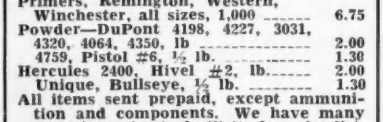
All items sent prepaid, except ammunition and components. We have many more items in stock. Write for price list.

Southwestern Distributor Official N.R.A. Targets

THURMAN RANDLE & CO.

208 N. Akard St. Dallas 1, Texas

—HANDLOADER'S ATTENTION—



BEANE'S DECAPPING PIN

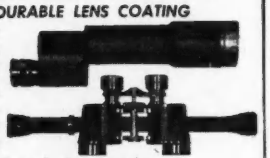
AT LAST—A decapping pin that will punch out those crimped in arsenal primers. Guaranteed. Price $2.50. Fits Pacific & Universal tools or any tool with bullet seater size 9/16 X 18 thread.

BEANE'S GUNSHOP ● 806 Alice Street Modesto, Calif.

KLEARCOTE

THE DURABLE LENS COATING

For Your 'Scopes, Binoculars and Camera Lenses, Usefulness of All Optical Instruments Greatly Improved.



THE ORIGINAL, COMPLETE COATING AND REPAIR SERVICE FOR SPORTSMEN AND THE TRADE.

Send Work Or Inquiries To:

OPTICAL COATING LABORATORY, INC.

711A Eighth St., N.W. Washington 1, D. C.

'SCOPE DOT RETICULES

installed in any scope. Unsurpassed for quality and dependability. Complete line Unertl, Texan, Weaver Scopes; Buehler products. King-Pike Mounts. Standard discounts to dealers and gunsmiths. Free literature.

T.W. STEIN, 854 S. Washington, Butte, Montana

Lawrence SADDLE LEATHER CARTRIDGE BELTS

. . . Also holsters, shell cases, western saddles, other saddle leather products. Made by pioneer Western saddle makers since 1857. Ask your dealer or write for catalog.

THE GEORGE LAWRENCE CO., Portland 4, Ore.

LIKE NEW, COLT COMMERCIAL 45 WITH conversion unit $75.00. High-Standard H-D, King sights and action job, Sanderson grips $65.00. Excellent, 32 Cal. Police Positives $25.00. S&W 1917, $32.00. S&W 32 Hand ejector $35.00. Lugers, P-38's, $25.00. Winchester 70, 30-06, Weaver scope, $100.00. Lead shot 25¢ pound. 45 A.C.P. 03¢ stamp new gun list. Cushman Shooters Service, 12 Tilton Ave., Brockton 23, Mass.

---

22 BALLARD, HEAVY BUHMILLER, blocks. Beautiful cherry checkpiece stock. 9½ pounds. Bill Hill customized. Fired 190, accurate, perfect $89.00. Mauser 6.35 magazine, cartridges, holster $28.00. W. D. Anderson, 333 Williamson, Youngstown, Ohio.

.270 CALIBER REMINGTON 721, K6 SCOPE, perfect. First money order, $150.00. L. Earl Strickler, Member NRA, Luray, Virginia.

G43 AUTOMATIC RIFLE, HIGH STANDARD HDM. Want scopes. Hulse's, 541 Main, Circleville, Ohio.

I AM OFFERING TO DISCRIMINATING sportsmen some exceptionally fine rifles for varmint, Big game and target shooting. These include lever action, bolt action, and single shot rifles in popular calibers and in excellent condition. Also some pre-war Parker (Meriden) and L. C. Smith double and single shot guns for field and trap, and a few hand guns. Descriptive list on request. Garrison Lowe, 1144 Farmington Avenue, West Hartford 7, Conn.

.45-70-500 SMOKELESS CARTRIDGES. $3.48 per 40, $8.00 per 100. .45 Auto. $4.00 per 100. Mauser clips, M1888, 2 for $1.00. 1¼ in. rifle slings (used, good) 2 for $1.00. Special Offer, 12 two oz. cans rifle bore cleaner, plus 32 oz. gun oil plus 100 .30 cal. patches, $1.50. Send for lists of .45-70 rifles, carbines, parts and accessories. Bolin's Gun Shop, Route #1, South Amboy, N. J.

ANTIQUE GUNS AND POWDER FLASKS, Colt new line 22, nickel, full engraved, pearl grips, very fine $69.50. Colt #2 Derringer, fine $55.00. Colt new 41 nickel, center fire, loading gate, British proofs, very fine, $55.00. Colt Baby Dragon 4" 75% blue and silver plate, fine $115.00. Marked Philadelphia Derringer 7" overall, very fine $65.00. Williamson Derringer very fine to new $55.00. National all-metal Derringer, silver plated barrel, gold plated frame, full engraved including eagle and shield, gold and silver bit worn, fine $65.00. Springfield civil war musket, excellent out, good to V.G. in, with bayonet $30.00. 303 Savage lever action military with hand guard and bayonet stud, V.G. out, bore bit, rough, rare $85.00. Gun stock powder flask, large size, $30.00. Twisted Dolphins Flask small $35.00. Public property flask $30.00. Write or phone when planning a visit to my shop (located 20 miles west of Newburgh), as I am often away buying. Phone Middletown 96-3021. Herb Glass, Bullville, N. Y.

MAUSER SPORTER, 8MM, TAPERED BARrel, ramp front, pistol grip stock, VG, $55.00. Jap 7.7 rifle, 31" barrel, VG $18.00. Winchester M-62 hammer pump 22 rifle, excellent $32.00. William Boggs, 1783 E. Main, Columbus, Ohio.

OFFERING YOU—BRAND NEW WINCHESter 7505 Target Rifle $37.50 Remington 521 Target rifle, new $30.00. Colt Super .38 new $54.50. Lyman Challenger 4X new $75.00. Alaska, new $54.75. K4 new $37.50. Hi-Standard HDM new $42.50. Prompt shipment, George Bambas, Richmond, Illinois.

250-3000 SAVAGE. 99 R.S. $110.00. EXCELlent. E. F. Wright, 8508 S.E. Glenwood, Portland, Ore.

WINCHESTER MODEL 70—CHAMBERED for 30-06. Also Winchester Model 70 chambered for the Lovell 22-3000. Both guns equipped with G&H base for Lyman Alaskan Scope. Pacific Loading tools, cases, etc., for both. 20 gauge automatic Remington Model 11 equipped with compensator, G & H Circassian walnut stock. Wilson Arrow with G&H beavertail forearm & stock of Circassian walnut by G & H with necking and loading tools. These firearms are new. No reasonable offer refused. T. R. Baxter, "The Hill", Glen Road, Mt. Vernon, Ohio.

"BLU-BLAK is great stuff! It always is a delight to the customer and ourselves when we hand him his gun with the "Finish with a thrill" . . . that unbeatable BLU-BLAK blue. Your SUPERBA stock finish is working out splendidly." ARNOLD JUENKE. Santa Monica Gun & Rod Shop. Santa Monica, Calif.

See Page 65

CATALOG ON REQUEST

JAEGER CUSTOM BUILT RIFLES

For Most Popular Cartridges — Mauser or Springfield Action

QUICK DETACHABLE SIDE MOUNTS

Light Weight • Rigid • Can Be Attached or Removed in a Few Seconds

REBARRELING FOR SUITABLE cartridges in any desired weight • **REFINISHING** POLISHING BLUEING • **RESTOCKING**—HAND FITTED STOCKS in selected French or American Walnut

PAUL JAEGER • JENKINTOWN, PA.

SACRIFICE DUE TO ILLNESS. BRAND new Model 70 .270 Winchester $100.00. 1½ h.p. Evinrude Outboard Motor, used 8 hrs, cost $79.50 sell $50.00. Handee Highpower Grinder ¼" and ⅛" shank, accessories, cost $45.00 sell $30.00. "The Modern Gunsmith" 2 vols., Howe, cost $15.00 sell $10.00 new "Complete Guide to Handloading," Sharpe $6.00. Weaver K2.5 coated, used once $28.50. New Litschert Varmint Master, K2.5 $15.00 cost $18.50. Money back guarantee. F. J. Smith, 29 Jerome St., Brooklyn 7, N. Y.

BEAVERTAIL FOREARMS, EXTENSION semi-fancy walnut forearms, hand rubbed, longer and larger hand hold, the skeet and trap kind. For Winchester models 12, 97, and 42, all gauges. Give gauge and models, $7.00 postpaid. Satisfaction or money back. Walter Patsch, 1207 West 15th Street, Davenport, Iowa.

"AMMUNITION" JAPANESE SPECIALIST, Newton, 35 Whelen, 22 Varminter. 38 Specials $1.25 box. Information list 10¢. Brooks Cartridge Reloading, 488-B Cherry, San Bruno, California.

20-GAUGE FRANCOTE, MODEL "20", PREwar, excellent, 26" double barrel, chambers 3-¾", slight crack in semi-pistol grip. Asking $500.00. E. F. Cordall, Taunton District, Newtown, Connecticut.

UNFIRED 257 WEATHERBY MAGNUM. F. N. action, K4 Master Mount, beautiful, checkered, inlayed stock, sling, cases, dies $275.00. Leon Walton, Route 3, Uvalde, Texas.

WINCHESTER III-WALL 22 LOVELL Litschert 10x scope, 100 round ammunition, perfect $150.00. H. M. Witmyer, 8326 Harford Rd., Baltimore 14, Md.

RCBS 22 CALIBER BULLETS, 40-55 GRS. $2.35. Custom loading, most calibers. H. M. Dawson, Delhi, N. Y.

ACKLEY IMP. ZIPPER, WIN. 5-A, PERfect. Tool, components, sacrifice. Request details. Leon Arslanian, 154 N. Eighth St., San Jose, Calif.

FOR SALE: 38 SPECIAL ONCE-FIRED Cases, Mixed makes $4.00 per M. One make in Boxes $6.00, 45 ACP. Mixed $8.00 per M. One Make in boxes $10.00 per M. C. H. Lawson, 89 Myrtle Ave., Edgewater, N. J.

WINCHESTER STD. TRAP, M12, VR., PAD, Polychoke, excellent $185.00. Krag, 24" bbl., VG., $45.00. C. G. Turner, Rockwell City, Iowa.

.256 NEWTONS HAND RELOADER, COMplete for reloading .256 cases $20.00. Ernest Schantz, Annandale, N. J.

WINCHESTER 75, V.G. $40.00. LEATHERneck M165, perfect $40.00. Mossberg 46B exc. $18.00. Winchester 62A, exc. $30.00. Leatherneck M65 new $42.00. Jap pattern 26 original holster V.G. $17.50. O.M. 7½" barrel, Franzite target grips, V.G. $50.00. Target Shop, 67 Vernon St., Worcester, Mass.

Jiffy SLING KEEPER
NEW — Self Locking, $1.00
Simple but Effective p.p.
See July 'Dope Bag' pg. 66,
or write
PRODUCT RESEARCH & SALES
1750 W. Lawrence Avenue Chicago 40, Ill.

SHOOTER'S SUPPLIES

Winchester M/52, M/75, M/69 and M/70.
Remington M/37, M/521T, M/513T.

AMMUNITION
WINCHESTER REMINGTON
WESTERN PETERS
.22 L.R. — Regular and Match.
.32, 38, 45 Match.
Special case lot price to Clubs.

ACCESSORIES
All popular equipment and gadgets for the target shooter and hunter.

SEND CARD FOR LIST
Dealer orders invited

SAM BOND
SPORTSMAN'S SUPPLY
NEW PHILADELPHIA, OHIO

Make no mistake! Accept no substitute!

INSIST ON
LONE STAR DUST CAPS
the finest material, the most beautiful
Unconditionally Guaranteed, $1.75
At your dealer or direct
M. L. Smith - *Custom Guns* - Dept. A, Bryan, Texas

JORDAN
Multiple Reloading Press
Masters Machine Works
Brookville, Penna. *Write for Price List*

CONVERTED ENFIELD $42.00. CONVERTED Springfield $48.00. Both very good. John Seaver, West Rutland, Vt.

THOMPSON GAS CHECK BULLETS 38—.357—44 Special Heavy revolver hunting loads gas check bullets, tested custom loads, Hornet K 218 B, Lovells .250 .257. Select line cast bullets. Mandel Custom Loads, Willow River, Minn.

EXPERT RELOADING OF 30-06, SWIFT, Hornet, 257, 250-3000 and others. Powerful Keith hollow-point loads in 357 Magnum, 38 special and 44 Special to Keith specifications. Speer and Sierra bullets, gas-checks, primers and DuPont powders for sale. R. M. Moody, 1016 N. Warren, Helena, Montana.

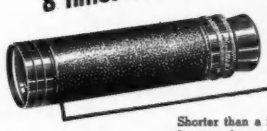
NEW WINCHESTER MODEL 21, 12-32, FULL matted rib duck gun 3" chambers, perfect $250.00. Parker GH 12-30, mod. full, beaver tail recoil pad, excellent $135.00. F. Brobeil, 61 Marquette, Kenmore, N. Y.

THE *Monette* 8 x 30 PRISM SCOPE Brings you 8 times as close

On the range.

In the field

In the stands



Shorter than a fountain pen, a fraction the weight of binoculars—that's the new Monette 8 x 30 Prism Scope. Because it has no draw tubes, no offsets, the Monette is always ready for instant use.

- COMPACT—only 1¼" dia., 5" long.
- CONVENIENT—one-hand focussing.
- LIGHT—weighs but 5¼ oz.
- POWERFUL—8 power magnification.
- HANDSOME—self case in top grain leather.
- WIDE FIELD—300 ft. at 1000 yards.
- BRILLIANT—superb definition, sharp and clear to the very edge, achieved by the finest precision ground and polished lenses and prisms, with anti-reflection coatings.

Deluxe Monette, in black finish, less case $49.50
Instant Zipper suede case for above 1.75
Custom Monette, with gold finished fittings and suede case 99.50
Neck Cord, with strap 1.25
No federal tax. At finer stores or from

KOLLMORGEN *Optical* CORPORATION T.M. Reg.
4 Franklin Ave. • Brooklyn 11, N. Y.

A SHOOTER'S SILVERSMITH

Custom Made Silver Work for the Shooting Public
Send me your favorite medal for mounting
On a 2x3 inch Western Type Sterling Buckle $18.00. In Plastic, Easel Type $7.50. A Paperweight $5.00, Nameplates in Sterling from $1.50. Brass 75 cents. Heavy Cast Sterling Ornamental Nameplates $12.00. Heavy Cast Ornamental Grip Caps in Sterling with Your Name Engraved Rifle or Shotgun Models $10.00.
Special Award Buckles and Prizes to Order
SILVER FULLER THE ROARING FORK SILVERSMITH
P. O. Box 180 Glenwood Springs, Colo.

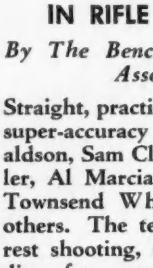
NRA BOOKS

THE ULTIMATE IN RIFLE PRECISION

By The Bench Rest Shooters' Association

Straight, practical information on super-accuracy by Harvey Donaldson, Sam Clark, Jr., Ray Biehler, Al Marciante, Clair Taylor, Townsend Whelen and many others. The technique of bench rest shooting, stocking and bedding for accuracy, chambering, bullet-making, core-forming dies, and other hot tips for the shooter with average equipment. Match records and rifleman's directory. 150 pages, 20 illustrations.

$4.00



HUNTIN' GUN

By

Walter Rodgers

The instinctive, "gun feel" shooting methods of the old-time Westerners are woven into the funniest, most exciting *true* stories about hunting and shooting you'll ever read. A different kind of hunting book.

$3.50

COMPLETE GUIDE TO HANDLOADING

By Phil Sharpe

The WHY and HOW of RELOADING rifle and handgun ammunition together with suggested loads. For many years a best seller. Latest Edition.

$10.00

The NRA Book—

Vol. I — Pistols & Revolvers $10.00

Vol. II — Rifles $12.50

Boxed set containing both volumes $21.50

Write for just-issued List of Rifleman Books

NRA Book Service

1600 Rhode Island Ave. N. W. • Washington 6, D. C.

WAR SURPLUS!

DOUBLE ARCTIC SLEEPING BAGS

Complete with Carrying Case

$29.95 Prepaid

Two complete sleeping bags, both insulated with 40% down & 60% curled feathers. Inner bag 32" x 82" with 30" zip. Outer bag 34" x 72" with full 100" zip. Use bags separately in moderate weather . . . or both together in sub-zero weather. A-1 Condition. Outer Bag Only, pp. $16.00; Inner Bag Only, pp. $14.00. New Dbl. Arctic Bags, pp. $39.95. Rubberized Bed Roll Tarps, pp. $4.00.

Bag Liners pp. $1.25—Bag Covers pp. $2.95

WARSHAL'S

First & Madison (Dept. B) Seattle, 4

JAEGER QUICK DETACHABLE SLING SWIVELS

1" or 1¼" — NEAT — LIGHT

#1 Wood Screw Stud	#2 Machine Screw Stud with Nut	#3 Machine Screw Stud with inside barrel band
$1.75	$2.00	$3.00

GIVE SIZE OF BARREL BAND

PAUL JAEGER • JENKINTOWN, PA.

SQUIRREL HUNTERS

The Squacky Squirrel Call is so natural it will bring squirrels out into the open. Hand operated and so simple a child can use it. Works on gray and fox squirrels. Guaranteed to satisfy or money back. Full directions. Price $2.50. See your dealer or order direct.

Squacky Squirrel Call Co., Dept. AR-89, Flora, Ind.

SPECIALIZING in Improved and Wildcat Calibers

A few listed below:

.219 Wisp	.220 Swift Imp.	.228 Magnum
.22/250 Imp.	.257 Imp.	8 MM '06 Imp.
.25/06 Imp.	.270 Imp.	.35 Whalen Imp.

Chambering or rebarreling to your action or to new F.N. Action. Dies and bullets. One week delivery on "Miser Magnums." Chambering.

Write for Illustrated price list.

HOFFMAN Custom Gun Shop • Evanston Wyoming

Safer Gun Cleaning with HOPPE PATCHES

Won't jam. Made in sizes to fit every gun from .22 cal. to 12 gauge. Get all fouling out quick and easy. At your dealers. Write for FREE "Guide to Gun Cleaning."

FRANK A. HOPPE, Inc.

2321 North 8th St. Philadelphia 33, Pa.

CANJAR PRODUCTS

Set Triggers **Palm Rests**

Single Triggers

Adjustable Butt Plates

The above items are available for most popular bolt action rifles. Write for details

M. H. CANJAR • 4476 Pennsylvania St. Denver 16, Colorado

S & W MAGNUM-EXCELLENT—6½" BARrel, wide hammer, short action, pointer stocks with complete loading tools—Potter Automatic Duplex press—dies—4 cavity mold—Essanee lubricator, powder, bullets, melting pot, ladle, 3000 primers $150.00. Colt Woodsman, excellent, custom heavy barrel, Berdon action, wide trigger, Pointer Stock $55.00. Colt Officer's Model 22 Target perfect $50.00. Colt .45 Automatic, excellent, King sights $50.00. Recently from Germany—Free Pistol—Syst: Buchel-excellent 14" barrel—adjustable set trigger—leather carrying case $85.00. Also very good Luger 4" barrel $30.00. C. W. Reynolds, 1809 Virginia Road, Winston-Salem, N. C.

LOOK SHOOTERS—NEW COATED 4, 6 AND 8X Hensoldt scopes with Redfield Jr. mounts attached. Custom mount rings for Redfield Jr. base—Any size—we fit all scopes $12.00. German mounts removed, optics cleaned and scope reblued—$10.00. Coating and reticule service. Schmidt rasp—⅞, ⅝" cutter, $3.50—⅞, ¾, ⅝—$5.00. The fastest clean-cutting tool a lazy gunsmith ever pressed into walnut. Speed action Springs with more snap than an offended mother-in-law, Mauser, Enfield, Springfield—a buck. Postage please, two-bits on rasps, 3¢ on springs. COD's—sure we love 'em. Schmidt Precision Products, 3027½ Dolores Street, Los Angeles 41, Calif.

PURE BRED AMERICAN POINTERS 6 months old. Not registered females $15.00. Males $20.00. Don Boyer, Lewistown, Montana.

CUSTOM 2R HI-SIDE, PERFECT, $90.00. 6.5 mmx20 Ga. O/U, dies, components, very good to excellent, $135.00. .30-06 M70 Target Wt. barrel, Perfect, $25.00. Remington M37 barrel, perfect $20.00. E. E. Spicer, 35 Tamarack Rd., Pittsfield, Mass.

NEW STORE NOW OPEN. VISITORS WELcome. Antique and Modern Guns for shooters and collectors. Target supplies, scopes etc. Send stamp for list. Ray Walz, R10 Union, Middletown, N. Y.

THREE SCOPE-SIGHTED MODEL 70 RIFLES .270, to .30-06, and .257 Magnum 721 .300. Write for Prices. New Rem. 721 rifles, .270 and 30-06, targeted with Weaver K-2½, top mounts, $140.00 each. Enfield and Springfield Sporters $33.00 to $85.00. each. Several Ithaca, LeFever 12 double guns, $50.00 each. Rem. repeater, Ithaca single Trap guns $85.00 each. All very good. Frank Ora, Lakeport, Calif.

BIG GAME RIFLES, NEW AND USED. Rem. Win., Sav., also commercial Mausers, and Mannlicher Schoenauers. Robert Koch, Fredonia, Wis.

NEW GUNS, WINCHESTERS, MODEL 43 IN 218 Bee or Hornet, $54.95. model 70, 30-06 or 257 Lyman rear, $117.20. model 94, 30-30 or 32 special, $62.45. 75 Sporter $49.40. 52 Sporter $148.50. Model 63, $63.50. Remingtons, 141, 35 Cal. $104.95. 721, 270 cal. $79.95. 722, 300 Sav. $74.95. 241LA, $63.50. Stevens model 322 Hornet, $42.95. The New High Standard Model GE with 2 barrels 4½" & 6¾" $78.00. Many used Shotguns Rifles and Handguns. Write your wants. C. H. Lawson, 89 Myrtle Ave., Edgewater, N. J.

'23D K-HORNET WITH 6X SCOPE VERY good include cases, primers, loading equipment $100.00. John W. Crisford, 7065 Granada Lane, Mission, Kansas.

8 M/M MAUSER SPORTER D.S.T., 48M, ramp, tapered barrel, new Sporter stock, perfect $90.00. 35 Rem. pump new $90.00. 8 m/m barrel and action, Redfield, ramp, loscope bolt reblued $55.00. Italian 6.5 carbine VG $10.00; same without mag. catch extra bolt $10.00. Military Mauser pistol rechambered to super .38 vg. to Exc. $65.00. 9 m/m Luger VG to exc. $35.00. P-38 vg. $25.00. Steyr 9 m/m g. $20.00. Steyr 8 m/m vg. $25.00. Webley Scott .455 auto g. $16.00. Nambu 8 m/m vg. $17.00. .45 ACP vg. $22.50. R. W. Krohmer, 1609 Mahantongo St., Pottsville, Penna.

MODEL 52 WINCHESTER, STANDARD weight, no sights, excellent $68.00. F. G. Brehmer Jr., R.F.D. #1, Red Hook, N. Y.

BARRELING—Wildcat & Standard

Chambering for 39 calibers, .45 auto slides bushed. General Gunsmithing. Mannlicher type Rifles. Life Member.

KENNEY'S RIFLE CORNER 230 S. First Ave. Sandpoint, Idaho

IS "FACTORY" AMMUNITION TOO HIGH ? ? ?

Sure it is, if one buys enough of it to really learn to use his rifle and place his shots. HANDLOADING is the answer to this high cost as you can reload your empty case for 5¢ or 6¢ or even less, depending on the caliber. Factory ammo is 2 or 3 times this. Besides the savings, you get better accuracy by balancing the load to your own rifle and also a hundred times more fun.

RIFLE RANCH stocks loading tools in all popular makes and priced from $9.50 to $55.00, the components, balances, tools, dies, books and in fact everything you can need or want for handloading. We cater to both the beginner and the expert and are always glad to help you with your problems or advise you on loading tools. Beginners should order a copy of the NEW #36 IDEAL HANDBOOK @ 50¢ and the BELDING & MULL HANDBOOK @ 60¢ (add 5¢ postage) and learn the fundamentals before buying any make of tool.

Send stamp for complete list. Prompt service a specialty. Get all your needs from RIFLE RANCH. Let's get acquainted.

JIM WILKINSON ● **RIFLE RANCH PRESCOTT, ARIZONA**

.218 MASHBURN, WINCHESTER H. S. Buhmiller barrel, tear drop lever, a beautiful gun, $140.00; Russian 6x scope and mount, blue poor optics excellent, $55.00. Winchester L. S. action, old barrel and stock included, $25.00. Standard barrel for 52 slight ring, $16.00. Ballard custom target rifle, bullgun, an ideal offhand gun, $130.00, iron sights for same $12.00, 12x, 1½ Unertl target scope, like new $85.00. Bob Leipold, Mt. Carmel, Ill., R. R. 4.

PRIVATE—GERMAN HENSOLDT WETZlar featherweight 7X42 JAGD Dialyt hunting Binoculars. Used—like factory new. $75.00. Also Colt .45 peacemaker, single action Army, 1871 issue, Western style holster & belt. Excellent condition $105.00. Mr. Cornwell, Redwood, New York.

30 CAL. CORE-LOKT BULLETS $5.00 HUNdred. New primed 30-30 cases 4¢. A. Warner, 2131 High St., Oakland, Cal.

WINCHESTER H. B. 52, MARKSMAN stock, 48 rear, Redfield front, #46920B, very good, $65.00. Springfield N.M. #1496236, very good. $65.00. Springfield DCM Sporter #1361573, good, $65.00. DCM Sporter barrel, new, never used, with star gauge record $25.00. War II Colt manufacture .45 auto. service finish, good, 3 magazines, $40.00. S&W, 38-40 Outdoorsman, excellent inside, some holster wear, Heiser holster, Franzite grips, 600 handloads, 3.5 Grs. #6, $65.00. Colt Shooting Master revolver, caliber .45 auto, excellent inside, minor blue wear, Heiser holster, $65.00. Sealed case 1500 cartridges, .30-06 TW42, cartons, no clips, $75.00. Sealed case same DEN 43 $75.00. 1,000 rounds FA 39 M1, 173 Gr., clips $60.00. Paul Stanley, Trona, California.

219 DONALDSON, GREGOIRE BARRELS, fitted and chambered by Wallack, the winning combination. For Bench rest and varmint; also small bore shooters, get a Gregoire barrel fitted to your standard action and watch those groups close up. L. R. Wallack, Langhorne, Pa. (note new address).

EXCELLENT SPRINGFIELD SPORTER, above 3,000,000, Bishop stock, Lyman 48, ramp front, reblued, $95.00. Perfect 6x Unertl 1", Lee Dot, recoil spring $58.00. Robert Bryarly, 605 Institute, Valparaiso, Indiana.

NEW HENSOLDT 4x DIALYTAN $58.00, 2-2/4X Duralyt $51.00. New .22-250 bull gun on Enfield action, write for details, $105.00. I have a full line of new, latest model, scopes and mounts at lowest prices. K2.5 with Buehler or Mashburn $39.50, K4 $45.50. Gerald McNutt, 389 Champion, Battle Creek, Michigan.

A PAIR OF THE FINEST GUNS IN AMERica; .303 British Holland & Holland Modele DeLuxe Double rifle with ejectors, single trigger, etc., and Holland & Holland 12 Ga. Royal Hammerless Ejector Double Shotgun; both excellent, each in leather trunk case. Write for description and price. Ray Equipment Co., Rock Creek, Ohio.

HI-WALL 2R LOVELL, H.B., CUSTOM stock, Fecker 8X scope, 175 cases, dies, good, $120.00. 1903A3 Springfield, converted military stock, new, test fired only, $75.00. Parker VH, 12/30, very good, in, fair out, $65.00. Colt Woodsman, pre-war, excellent in, very good out. Heiser holster, extra magazine, $55.00. G. Detmold, Aurora, N. Y.

STEVENS MOD. 311 DOUBLE BBL. SHOTguns. All ga. $52.25. Mod. 530 $57.95. Marlin M336 30/30 carbines. New $61.45 Perfect $54.00. F.B.I. style fast draw leather (revolver) holsters. Small $3.00 Med. $3.20. Large $3.50. F.B.I. style leather (automatic) holsters. Small $4.30 Med. $4.50. Large $5.00. Fast draw leather shoulder holster. Small $5.50 Med. $5.70 large $6.00. Many others. Write Wants. Freeland Arms, 607 Greenwood Ave., Brooklyn, N. Y.

SPECIAL CLOSEOUT:—WINCHESTER Model 75 Target Rifles, with Lyman 57E Receiver Sights, blade front sights, brand new in factory sealed cartons, while they last only, $41.95 Postpaid. Robert Haelig, Boundbrook, New Jersey.

RUFF-BLUE for Hunting Guns

Non-glare finish (no glossy blue look) prohibits rust. Gun completely stripped, cleaned, exposed working parts polished by qualified gunsmiths. Long guns, $8; hand guns, $6. One-week service. HISER'S GUN ROOM, 942 N. Park St., Decatur, Illinois. (Clip this)

Designed for Championship Competition

VAVER

Dial Micrometer Sights for All Popular Rifles

VAVER CORPORATION

2439 So. Kolin Ave. Chicago 23, Ill.

Money Back Guar.

7 x 50 PRISM BINOCULARS

Precision Optics BRAND NEW $36*

6x50 Achromatic Field Glasses $16*

***20% Federal Tax**

7x50 $36 Illustrated

Send for Free Catalog of Binocs., Telescopes & Micros.

BROWNSCOPE CO. 24 West 45th St., New York 19, N. Y.

LITTLE THINGS IN SMALLBORE DO BIG JOBS

WISLER ARM CUFFS

The original flexing, self-locking arm cuff for comfort, each	$ 4.00
Sling Hook	.75
Short Sling for Cuff use	1.50
KIT 22 carries everything	19.95
10X Rifleman's Glove $4.00—Protektor	4.00
10X Rifleman's Imperial $15.00—Aristocrat	14.00
3100 Sling Keeper locks the sling	.90
K-T Bipod Stands, eye close, elbows away	15.00
Mossberg Stand	11.95

SPOTTING SCOPES

Argus Super Grade	74.50
Unertl 63mm Straight Model	80.00
Unertl Right Angle	96.00
Mossberg	24.95
Saturn Scout	25.00
B. & L. 60mm	95.00

RIFLES & REVOLVERS

Model 70 National Match .30-06	157.65
Model 70 Bull Gun .30-06 & .300	194.85
M52 Standard, no sights, Marksman	86.35
M52 Heavy Bbl, no sights, Marksman	96.85
M52 Bullgun, no sights, Marksman	116.75
M37 Remington Rangemaster, complete	118.60
M37 Rangemaster, without sights	99.45
M52I Match Master, complete	57.00
"Junior Special" 52IT	36.95

A BIG ENFIELD JOB AT LOW COST

A trim sporting rifle from an issue Enfield. We mill receiver with flat top, radius to sides. Plug screw hole. Forge trigger guard straight. Shorten and reshape trigger. 5 Shot magazine. Cut and crown barrel to length. Strike and polish barrel, remove proof marks on barrel and left side receiver, completely reblue $27.50

WRITE FOR FREE CIRCULAR

WRITE FOR OUR TIME PAYMENT BLANKS

LOADING TOOLS & EQUIPMENT

Powders, Primers, Bullets, Primed Shells, Ideal Straightline Shot Shell Reloader	29.50

OFFICIAL NRA TARGETS

Wisler Western Arms, Inc.

63 SECOND STREET SAN FRANCISCO 5, CALIF.

"DAHL" RAMPS

New Dia. .560 to .660

⅜-½-9/16" Heights

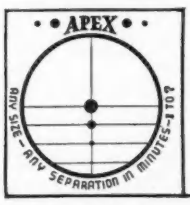
Choice of 1/16" Gold, Silver or Ivory Bead $8.25

DAHL'S DIAMOND GRIP CAPS

Tenite, 75, steel, blued or white, $2.50; Scoring Gauges, 22, 30, 38 cal., 35¢. 3 for $1.00. Guard Screws, Enf., Spgfd, Mauser, front, 15¢, rear, 20¢; Spgfd trigger guards, stripped, $2.50; Sling Swivels, Det., $2.00, plain, $1.00; Complete line Birchwood Products.

Mauser followers—Milled, new, $2.00. Enfield Speed Action $6.00

C. A. DAHL 1133 Balmoral Ave. Chicago 40, Ill.



APEX DOTS

"The most important part of a Center Dot is the spider silk, as all things depend upon it—accuracy, stability, etc.

In the early 1930's, the Rifleman ran an article on spider silk. Since that time, I have tried every spider I could find and have proved false many an accepted theory and method.

May I say, the specie of spider alone doesn't control the strength of web any more than to say the strongest Caucasian is stronger than a Mongolian or Negro of equal status."

Please send for free folder and price list.

Gordon L. Bailey P.O. Box 433, Lebanon, Pa.

SPRINGFIELD SPORTERS

Nickel steel action, LeFever stocks, checkered grip and forend, swivels, banded front ramp, Lyman #48 rear peep, 24" barrel, .30'06 caliber, new ... $87.50 Send for price list on military conversions, general gunsmithing, and money-saving arrangement on the purchase and mounting of scopes and accessories.

N. L. PAPERNEK

172 Fetter Ave. ● Trenton 10, N. J.

Pioneers AIR RIFLES BENJAMIN AIR PISTOLS Leaders

WITH SAFETY LOCK

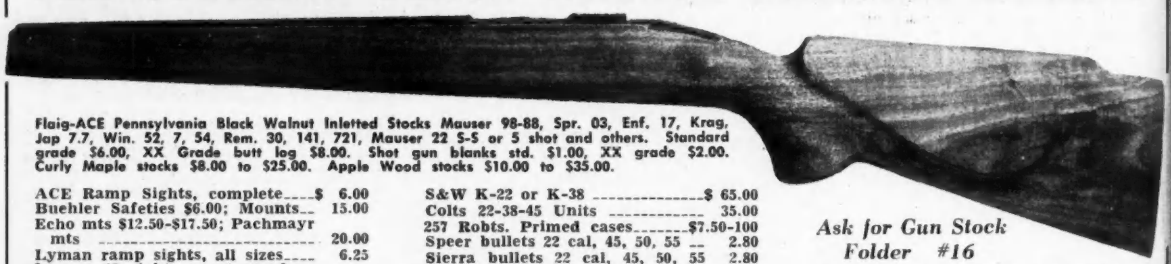
Send for Free Folder of Latest Models Today

If you want a REAL GUN for PRACTICAL USE inside or outdoors, get a SAFE — CLEAN — ECONOMICAL BENJAMIN with Amazing Accuracy and Adjustable Power. Use BENJAMIN H-C PELLETS for BEST RESULTS in all Rifled Models. WRITE AT ONCE.

BENJAMIN AIR RIFLE CO., 897 Marion St., St. Louis 4, Mo.

Flaig-ACE

PENNSYLVANIA BLACK WALNUT INLETTED STOCKS



Flaig-ACE Pennsylvania Black Walnut Inletted Stocks Mauser 98-88, Spr. 03, Enf. 17, Krag, Jap 7.7, Win. 52, 7, 54, Rem. 30, 141, 721, Mauser 22 S-S or 5 shot and others. Standard grade $6.00, XX Grade butt log $8.00. Shot gun blanks std. $1.00, XX grade $2.00. Curly Maple stocks $8.00 to $25.00. Apple Wood stocks $10.00 to $35.00.

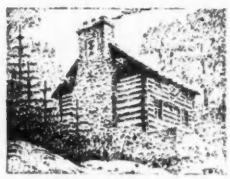
ACE Ramp Sights, complete	$ 6.00	S&W K-22 or K-38	$ 65.00
Buehler Safeties $6.00; Mounts	15.00	Colts 22-38-45 Units	35.00
Echo mts $12.50-$17.50; Pachmayr mts	20.00	257 Robts. Primed cases	$7.50-100
Lyman ramp sights, all sizes	6.25	Speer bullets 22 cal, 45, 50, 55	2.80
Lyman 48 sights, most numbers available	$12.50- 14.00	Sierra bullets 22 cal, 45, 50, 55	2.80
Redfield 102-70's most no.'s $6.50	9.50	Speer 25 cal 60, 87, 120 gr.	3.80
Krag Barrels made from Enf 24" good $12.00—6 or more each	10.50	Speer bullets 130 gr. SP 270 Cal.	4.50
M-98 Safes $1.00—Extractors	3.00	Speer bullets 30 cal. 110 gr.	4.25
B&L Binoculars Zephyr Light, hard coated lens 6x30 7x35 mm	186.00	150 gr, $4.50; 180 gr	4.75
Enfield extractors new	1.50	Spr. trigger guards milled new	3.00
Colt 45 mags, new $1.50; used	1.00	SPR. Triggers new $1; Extractors	1.00
Redfield Jr. Mts., $12.50, $14.50,	16.50	Spr. milled followers, new	1.00
Complete 98 M. bolts v.g.	12.50	Mauser 98 issue actions new 30.06 barrels or 300 Sav. cal. 4 gr	50.00
Mauser 98 stripped bolts v.g.	5.00	30.06 ammo 150 gr. M.C. late date $6.00-100	
Complete Enfield bolts $9.00. Stripped	4.50	CASE LOTS 1500 rounds	$78.75
NEW F-N actions with 30-06, 257, 270 Chrome Moly 24" sporter barrel fitted, white not blued	69.00	Primed cases, per 100, 300 H&W Win.	10.00
F-N actions with 220 Swift barrel or 22-250 cal. sporter or med. heavy, box shortened, white 25 in.	74.00	30-40 Krag $8.00—250-3000	7.50
F-N actions, late style Special price in lots.	45.00	Winchester Bullets, 25 caliber, 100 gr.	4.00
Spr. Actions complete $27.50 low numbers—Same with new 4 gr. Barrel fitted	42.50	270, 100 gr.	4.20

JOHNSON-MAKE

Chrome moly barrels 22" feather-wgt only Enfield 30.06 partially chambered. Threaded for Enfield $12.00. Lots of 6 or more $10.00 each. Will fully chamber $5.00 additional.

Ask for Gun Stock Folder #16

Jobbing:—Unertl, Texan, Lyman, Echo, Redfield, Leupold, Weaver, King, Buehler, G&H, Marble, Dockendorff New List Free, #16



"Serving Only Sportsmen"

Flaig's

MILLVALE, PENNSYLVANIA

LITSCHERT "SPOT SHOT SCOPES"

Now you can get the New "Spot Shot" 1¼" objective target and vermin scope in 10X, 12X, 15X and 20X with new ¼ min. click mounts.

These new scopes are precision made, have COATED OPTICS, NEW ¼ min. click mounts, and sliding-sleeve objective focusing adjustment. These scopes are made to fill a long felt need for a medium priced target scope that will really fill the bill. The "SPOT-SHOT" scope, with our NEW mounts, will give fine results in either target shooting or vermin shooting. Our new mounts have several mechanical improvements and finer finish. Write for our new literature.

PRICE of "SPOT-SHOT" scope 10X, 12X, 15X or 20X complete with mounts, dust caps, and recoil spring (less bases) $49.95

Write us or see your dealer about the new "SPOT-SHOT" scope. Dealers write in for new dealers set-up.

R. A. LITSCHERT Dept. A WINCHESTER, IND.

TRIGGER ATTACHMENT

FOR ENFIELDS, SPRINGFIELDS, MAUSERS, 30 REMINGTON and KRAGS

Complete with instructions for installing. Price $2.50

This attachment will take all the slack out of the trigger on any of these military actions and will give you as crisp a trigger pull as safety will permit.

See your dealer or order direct, giving make of rifle for which attachment is wanted.

ENFIELD RECEIVER precision ground full length, barrel cut off and muzzle crowned if desired, all for $5.00

STRAIGHTENED ENFIELD TRIGGER GUARDS Exchange $2.50

These guards are blued and furnished with one long screw. SOLD ONLY ON AN EXCHANGE BASIS. The above two items as priced do not include shipping charges. They will be returned C.O.D. if desired.

VIGGO MILLER, 4340 Charles St., Omaha, Neb.

PRE-WAR 70, .250-3000, EXCELLENT, AMMO. $125.00. Springfield Sporter, N.M. Action, Star gaged. Very good. $110.00. '98 Waffenfabrik—Oberndorf 30-06 Sporter Very Good $90.00. '98 Waffenfabrik—Oberndorf 257, Custom, Perfect $150.00. Stamp for details. M. E. Johnston, 315 Taylor Ave. S., St. Petersburg 5, Florida.

GOOD USED ARMY LEATHER RIFLE SCABbards, complete $2.95, .45 auto. holsters $1.50, rifle slings $.65, .30 and .45 caliber brass brushes $.95 dozen, flannel patches $1.50 thousand. Send for complete Sportsman's Catalog. Glendale Industries, 368 W. 50th Street, New York.

CUSTOM BUILT ERIC JOHNSON-MARTINI, perfect, Unertl tube, Olympic front, $150.00. Also Unertl right angle spotting scope, sheepskin case, K.T. stand, $80.00. Fred Schneider, 241 Third Drive N.W., New Philadelphia, Ohio.

SMITH AND WESSON 357 MAGNUM 6" blue excellent to perfect $125.00. Super Grade 70's $162.50. Custom gun work, varmint rifles a specialty. Sports Center, Inc., 215 Broadway, Paducah, Kentucky.

LUGER 9MM 1917 D.W.M. FIRED 16 TIMES. Holster, 12.5 rds. fresh ammo. $55.00. Excellent, first money order. G. T. Crenshaw (Member), Lawson, Missouri.

REMINGTON .300—$90.00, SAVAGE .300—$100.00. All new—many other guns in stock. Francis S. Boggess, Liberty, Missouri.

GUNBERTHS! THE VERY FINEST IN GUN Cabinets and Gun Racks! All sizes and types! Beautifully worked out—Reasonably priced! Write for illustrated price list free. Penn Taxidermy, Dept. C, Hazleton, Penna.

NEW GUNS: WINCHESTER, MODEL 70, 22 Hornet, $109.50. Model 71, 348, DeLuxe Model, $105.00. Model 64, 30-30 and 32 special, $82.95. Model 94, 30-30 and 32 special, $62.45. Model 43, 218 Bee, $54.95. Model 75 Sporter, 22 Caliber, $49.40. Model 63, 22 Automatic, $63.50. Model 61, 22 Hammerless, $49.95. Model 62, 22 Pump, $42.95. Winchester, Remington or Ithaca Pump Shotgun, 12, 16 or 20 Gauge, $84.95. Winchester, Model 12 Skeet Gun, Ventilated Rib, $185.00; Trap Grade, $190.00. Model 12, Heavy Duck Gun, Raised Matted Rib, $109.95. Remington, Model 722, 300 Savage, $74.95. Remington, Model 81, 30 Remington, $129.95. Model 241LA, 22 Automatic, $63.50. Model 121, 22 Pump, $49.95. Model 550, 22 Automatic, $34.95. Savage, Model 6, 22 Automatic, $32.45. Stevens, Model 325, 30-30, $42.95. Stevens, 22/410 Over and Under, $32.25. Mossberg, Model 151M, 22 Automatic Deluxe, $30.90. Marlin, Model 336, 30-30 and 32 Special, $61.45. Remington, Sportsman or Model 11, Autoloading Shotgun 12, 16 or 20 gauge, $99.95. Smith & Wesson, K 22, $65.00. Iver Johnson, and H & R, 22 Caliber Target Pistol, 6 inch, $24.75. Terms: $10.00 deposit with order; balance COD, or order will be shipped Prepaid, if full amount is remitted to Miller's Sport Shop, 142 North 8th Street, Dept. R., Philadelphia 7, Penna.

REDFIELD RAMP FRONT SIGHTS, GOLD bead, with hood, 24" Springfield, 24" Enfield, 26" Enfield (.600" fits most 24" Mausers), 24" Krag, $9.75. Same, in old style Lyman without hood, close-out, $5.00. Redfield 70 Series Receiver Sights, Hunter Knobs only, for most rifles, $9.50. Lyman 48's for Mauser, Krag, Enfield, Springfield, $12.50. All postpaid. Dealer's inquiries invited (on these items). Robert Haelig, Boundbrook, New Jersey.

MAUSER MILITARY PISTOL, GOOD $35.00. Mauser Bolo, fair plus $27.50, Mauser Hsc excellent $45.00, Luger Target Model 7" V.G. $45.00. Luger 4" V.G. $37.50, Jap revolver good $7.50. Nambu $27.50. Radom $24.00. Cased pair of Genuine Dueling pistols, Very fine $175.00. .45 Repair kit, includes all parts except receiver $14.95. Gun List 10¢. Art Cooke, Darby 1, Penna.

FINE *CUSTOM MADE* GUNS
ENGRAVED RIFLES—.220—.257—.270—7MM
ENGRAVED SHOTGUNS—12—16—20—28—.410
ROY VAIL • Warwick, N. Y.

Guaranteed Life Time WARSHAL CUSTOM BUILT RIFLES

(Licensed U.S. Arms Mfg.)

★ Made in our own arms plant to your specifications. Because of the individual attention . . . and finest materials you are assured of the finest rifle it is possible to assemble . . . and with a Warshal Life-Time Guarantee.

WARSHAL SPORTER RIFLE

CALIBERS: 30-06, .300 Savage, 7mm, .270 Win., & .257 Roberts. F&N Mauser action. Chrome Molybdenum 6 groove Adair bbl. Oil finished pistol grip, walnut stock, with cheek piece. Redfield 102 R.S., Ramp F.S. 24" bbl. Wt: 8 lbs. PREPAID **129.50**

WARSHAL SUPER MODEL

CALIBERS: .30-06, .300 Sav., 7mm, .270 Win. & .257 Roberts F&N Mauser action. Chrome Molybdenum 6 groove 24" Adair bbl. Oiled Black Walnut pistol grip stock with Monte Carlo cheek piece. Lyman 48 R.S., Ramp F.S. 1" Whelan type Sling. Q.D. Swivels. Wt: 8 lbs. PREPAID ..... (Above in .300 Magnum $175.00) **149.50**

WARSHAL TARGET MODEL

CALIBERS: .220 Swift, .22/250, F&N Mauser action. Target wt. 26" Chrome Molybdenum 6 groove Adair bbl. Oil finished pistol grip Black Walnut stock. Lyman 48 R.S., Ramp F.S. 1½" Army type sling with Q.D. swivels. Wt: 13½ lbs. PPD. **159.50** (Above in .300 Magnum $185.00)

Write for Special Order Blank!

HAND GUNS (Prepaid)

H & R 922—9 Shot Target Revolver, 6" Bbl	$24.75
H & R Sportsman 22 Target Revolver	44.95
S & W M&P 38 Spl., 2, 4, 5, or 6" Bbl	56.50
S & W K-38 Target, 6" Bbl, Rib	65.00
Hi-Standard H/B Auto 4½" or 6¾" Bbl	42.15
Hi-Standard GB Auto. 22 cal., 4½" or 6¾"	50.00
Hi-Standard HD-M Auto. 22 cal., 4½" or 6¾"	55.00
Hi-Standard m/G .380 cal. Auto.	55.00
Colt 38 Super or 45 Auto Pistol	65.00
Colt 22 Conversion Unit for Above	40.00
Colt Officers Mod. .22 and .38 cal.	75.00
Colt Woodsman Sport, 4½" Auto.	60.00
Colt Woodsman Target 6" Auto.	70.00
Colt Woodsman—Match Target Auto	85.00
Czechoslovakia .32 Automatic	52.75
Czechoslovakia .25 Automatic	39.50
Crosman New CO-2 Pistol. 177 or 22 cal.	18.90
Holsters, Basket Stamped. State Type Gun	4.25

12 ga. Sing. Shot Shotgun, War Surplus $16.95

Smith & Wesson .22 CAL. REVOLVER K-22

The Masterpiece has Ribbed Barrel, Micro Click Sight, 9" Bbl, 6 Shot Short, Longs, or Long Rifle Ctgs.

PREPAID $65.00

ACCESSORIES

22-45 cal. PISTOL ROD-1 pc. alum.	pp. $ .79
Q.D. SLING SWIVELS, 1"-1¼" pr.	pp. 1.75
45 AUTO. GOV'T FLAP HOLSTERS, new	pp. 1.95
.30 Gov't Rifle Rod, 1 pc.	pp. .69
U.S. Gov't Slings, 1¼" A-1 cond.	pp. .69
Rubber Recoil Pad & Boot	pp. .49
Sling Swivels, 1¼", 1", pair	pp. .75

6 x 24 IMPORTED BINOCULARS with Case. Includes Fed. Tax pp 30.00

7 x 50 IMPORTED BINOCULARS with Case. Includes Fed. Tax pp 48.00

UNCONDITIONAL MONEY BACK GUARANTEE ON EVERY PURCHASE

WARSHAL'S SPORTING GOODS CO.

FIRST AND MADISON, DEPT. B — SEATTLE 4, WASH.

TROPHY FOR ONLY $1.25—SHOOTING Oscars", our new rifle and pistol awards. Write or information. Wahl Arms Company, Bogota, J.

WEAVER SCOPES, FACTORY NEW LATEST Models, "K" Scopes have covered click adjustments: K2.5 Coated $30.50, K4 Coated $36.50, K6 Coated $39.25, Rangefinder $5.00, Dot $7.00. J2.5 $9.00, J4 $23.50, Weaver Detachable Mounts $3.50, Alaskans $52.50, Hawk $47.00, Argus Spotters $59.50, Mark 245 $65.00, B. & L. 60mm $35.00. All New, Postpaid. Write for complete bargain list: Scopes, Mounts, Binoculars. Satisfaction Guaranteed. S. A. Wentling, Palmyra, Pa.

12 GAUGE BELGIUM BROWNING AUTO Barrel 28" solid rib, full choke, good $20.00. 38 Colt 5" Bbl, Official Police Revolver excellent $35.00. 32 Walther PP very good $29.00. 9mm Spanish Astra excellent $50.00. Marlin 30-30, 336-A Brand New $57.00. Marlin 30-30 Model 336A-D1 $72.50. 22 Savage Hi Power 1899 Model Very good in but needs reblue out $40.00. New 22 Remington 300 $69.50. Peter 12 gauge 00 Buckshot, $1.45 per box, $1.35 case (27 boxes to case). Want 22 Derringers and Walther 22 PPK. Eddie Perel, 715 Congress, Houston, Texas.

WINCHESTER .218 BEE MODEL 43 PERfect with J2.5 scope $64.50. Reardon, 3740 Dixboro, Ann Arbor, Mich.

WE AGREE WITH BARR THAT SWAGING is the best way to remove arsenal crimp for '06 cases. To insure properly fitting primers, use the new Ennis Primer Pocket Swage in your Pacific press. $5.75 Postpaid. W. J. Ennis, 11500 Pennsylvania Avenue, Hollydale, California.

COLT FRONTIER D.A. 41 LONG, 4½", EXcellent $65.00. Colt Single Action Army .32/20, 5½", Very Good $65.00. W. K. Beagle, 107 Seminary St., Williamsport, Pa.

AMERICAN RIFLEMAN, JAN. 1942 TO DEC. 1948, inclusive. Excellent condition, $10.50. I. H. Austin, 1025 S. Spruce St., Casper, Wyoming.

OVER AND UNDER PA. PERCUSSION rifle, 40 cal. fine, $100.00; Pa. flintlock by Burd, superb piece $400.00. Capt. Dillin, 325 Abbey, Drexel Hill, Pa.

J. G. S. BULLETS — 30 or Standard in all Calibers and Weights

BANTA DIES — .224, 228, and .257 Calibers

MODERN GUN SHOP BULLET CO.

Hollydale, California

SEMI-INLETTED STOCKS *For Fine Custom Rifles* **Hutchings**

Made for the discriminating stockmaker. Ample wood to get individualized fit plus a comb amply high for a target stock. Prices start at $12.50 F.O.B., Los Angeles. Available for Springfield, Enfield, Mauser 98, Mauser Kar, Mauser 33/40, Short Mauser, Krag, Win. M-70, Rem. 721, 722. Bench rest shooters att'n.: Stocks with no guard or magazine cuts. Available in Springfield, Enfield, Mauser 98, Mauser Kar, Short Mauser. We also do custom work and handle many accessories. Write for folder. Phone YOrk 2552

W. R. HUTCHINGS: 4504 W. WASHINGTON BLVD.: LOS ANGELES 16, CALIF.

PARKER-HALE RODS—NOW ONLY $2.95. Finest 22 rifle cleaning rod obtainable. One-piece, tempered steel, tough plastic covering, ball-bearing handle, plug and jag tips. Were $3.95. Wahl Arms Company, Bogota, N. J.

SPRINGFIELD 30-06, TEXAN—MASHBURN Mt., Lyman 48, Redfield ramp, Buehler safety—Good to excellent $170.00. M70 .257, Challenger Lee Dot, Mashburn Mt.—Excellent $220.00. Remington 48 11A, 12 Ga Ventilated Polychoke—Excellent $118.70. W.J.B. Swank, RR1, Eaton, Ohio.

FORT SHERIDAN IS NEXT DOOR. CAP & Ball shooters. Collectors firearms. Write wants. J. S. White, 2207 Lincolnwood, Highland Park, Illinois. Telephone 2435.

10% DISCOUNT TO N.R.A. MEMBERS! Complete stock New Model Shotguns, Hi-Powers, Pistols, Reloading Supplies, Scopes and Ammunition. Remington M48 auto shotguns $89.00. Remington 721s $71.95. Winchester M43s $49.45. Hi-Standards HB $37.50; HDMs $47.50. Barnes 30/06 150gr. Spitzer bullets $4.50 per 100. Complete list new and used guns, Speer and Sisk Bullets, Pacific tools. Stamp appreciated. Joe Ivy, 910 Burlington, Dallas, Texas.

CLOSE OUT SUNBEAM SHAVEMASTERS, Model "S" regular $23.50 shaver at $12.00 postpaid. (Latest model prior to May 1949) Brand new, factory guarantee. S. A. Wentling, Palmyra, Pa.

CHAMBERING REAMERS HEADSPACE GAUGES

THE BEST THAT MONEY CAN BUY

They're used year after year by America's top gunsmiths and shooters who demand meticulous accuracy.
H & M chambering reamers and headspace gauges are built to a standard and NOT to a price.
Headspace gauges are oil hardened then chrome plated. 20 different sizes from 177 Woodsmen to 505 GIBBS. Chambering reamers in 60 different calibers. Reamers for special bores made to your specifications.

New Calibers Just Added
256 Newton, 30 cal. Newton.
256 Barnes, 35 cal. Newton.
256 "Jap" Roberts, 228
Ackley, 33 Winchester

WRITE For New Catalog

H&M TOOL CO. 250 E. Nine Mile Rd. Ferndale 20, Michigan

Rifleman Subscribers Like this

HANDY BINDER

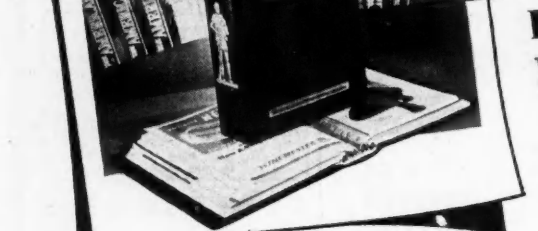
$2.95 POST PAID

Maroon covers die stamped in gilt—
Holds a full year of AMERICAN RIFLEMAN

National Rifle Association

1600 Rhode Island Ave. Washington 6, D. C.

THE *NEW* VENTILATED RAMP



Pat. No. 46.481

Height 3/8", 1/2" and 9/16"—complete with 1/16" or 1/32" Gold or Ivory bead standard Dovetail Sight and Hood. Barrel diameters from .50 to .70 inch. $9.00 Plain Ramp $7.00 complete. The above ramps without barrel-band: Ventilated $5.50, Plain $3.50, complete. Match grade chrome-moly 6-groove rebarreling (including bluing). $35.00.

Write for your copy of our new free catalog.

THREE LEAF REAR FOLDING SIGHT

The Fastest Hunting Sight

One Leaf $8 Two Leaf $9 **$11.00**

Adjustable for Any Range

TERHAAR GUN WORKS

3108 Main Street

JACKSONVILLE 6, FLORIDA

DEALERS—GUNSMITHS!

PROMPT DELIVERY

Huge stocks: Redfield, Lyman, Marble metallic sights. Weaver, Lyman, Unertl & Texan scopes. Redfield, Buehler, Echo, Pachmayr, Stith, G & H & Weaver mounts.

STANDARD TRADE DISCOUNTS (initial orders from new accounts not listed in D & B must be at least 3 units.)

BADGER SHOOTERS SUPPLY

Owen, Wisconsin

SUPER VALUES!

for every shooter, in this list.

.38 Super Automatic pistol ammunition, Remington Kleanbore, nickle cases, fresh stock, per case of 2000, fob	$ 60.00
Victor Visible 17 drawer file, takes 5X8 cards, with 5000 cards, etc. NEW	115.00
Winchester Model 52 Sporting rifle, no sights, absolutely perfect, post-war	105.00
Weaver K2.5 scope with 2¾" Lee Dot, coated lens, (not latest type) NEW	30.00

Going out of business, so if you are interested in other bargains, write for new list just out.

A. J. KEIM

FREDERICKSBURG, OHIO

ANNOUNCEMENT

To our present imported engraved shotguns, we have been honored to add a fine London-made double, and a selection of Drillings, Superposed Doubles and combination guns by a renowned firm of German gunmakers.

Our Catalog supplied on request
Trade Inquiries Invited

TIMBERLINE PRODUCTS, North Bend, B.C.

GAS CHECKS

.22, .25, 6.5mm, .270, 7mm, .30, .32, 8mm, .348, .35— **$1.50** Per M Postpaid

For your convenience, also packed 650 for $1 bill
Quantity discounts on request
LIST OF SHOOTER'S SUPPLIES

WARNER & SON 2510-12 Pleasant Valley Altoona, Pa.

DE-SLACK BOGUT TRIGGER ATTACHMENT

For SPRINGFIELD, MAUSER, ENFIELD, KRAG Rifles Completely removes first stage military pull. Places trigger in position to give short, steady, smooth trigger performance. No drilling, no wood to remove, instructions for quick installation included. Specify Rifle.

$1.00 pp **J. C. BOGUT** Hudson, Wisconsin

KILBOURN 22 K-HORNET

3200 ft. per sec. with 41 gr. bullet. Longer range but still mild report. Rechambering $5.00. Data on this and K-Lovell, K-Zipper, and K-220 Swift sent on request. Limited number of rebarreling jobs will be accepted at this time. Stamped addressed envelope appreciated.

Lysle D. Kilbourn (Originator) Whitesboro, N. Y.

SIGHTS

RETAIL AND WHOLESALE

We believe that we have the largest and most complete stock of ALL MAKES of sights, scopes and mounts in the U. S. Expert sight mounting and targeting. Fast and accurate service.

Dealers inquiries invited.

WRITE US REGARDING YOUR SIGHT PROBLEMS

THE ORIGINAL SIGHT-EXCHANGE

"Gun Sight Specialists"

P. O. Box J Paoli, Penna.

NUMRICH SPECIALS—ALL BELOW NEW, perfect or excellent except where noted. 30.06 Springfield Sporter, 48S rear, Gold Sheard ramp, checkered stock of figure walnut, oil finished, QD swivels, trigger action shortened. Only $95.00. '98 Mauser deluxe sporter, 48M, ramp front, fiddle back design checkered stock, tenite fittings with white spacers, QD swivels, sling, $95.00. 30.06 F. N. Mauser custom 24" bbl. with Johnson Muzzle brake. Redfield 70, Gold Sheard front, Deluxe stock of figure walnut, fine oil finish, Foretip and pistol grip cap white tenite, White Line recoil, QD swivels, sling, A beauty $160.00. 30-06 Mauser Sporter, cheekpiece, set triggers, scope blocks, checkered, stock nicely repaired rust spot, scroll engraving, very light, only $90.00. 30-30 Savage 219, $24.95. 30.06 Springfield, as issued, good $39.95, 6mm Winchester Lee, sport model, Lyman rear, red bead front, v. good with shells, $29.95. 6mm. Navy Lee, as issued, fair/good, $24.00. 8mm Swedish Husqvarna sporter, new, $109.00. Model 70 Target .270 caliber, K-6 Lee Dot, dust caps, 10 boxes new ammunition, 300 bullets, Hollywood dies, complete $236.00. Double Rifle, under lever break, lever foreend, hammers engraved as is complete action, extra firing pins etc., Joseph Springer, maker, 11.6mm—with 6 shells, $82.50. 7.9 Mannlicher, set triggers, 19" bbl. 40" O/A, out good, in excellent, $85.00. Colt 38/40 pump, out fair in good, $24.95. .219 Zipper, Winchester 64, $69.95. '98 Mauser 30.06, Redfield rear, ramp front, cheekpiece, recoil pad, diamond inlays on stock, checkered, $95.00. 30.06 Springfield Sporter, Redfield rear, cheekpiece aluminum pistol grip cap and butt plate, $87.50—same with Lyman rear, black tenite fittings, swivels $87.50. .22 H&R 365, $19.95, .22 H&R Leatherneck, $42.00, .22 Hanel KK Sport, Bohlerstahl barrel, double set triggers, Schuetzen target stock, (not original) adjustable rear, hooded front, outside fair/good, inside excellent, $58.00—same without sights, regular checkered stock, excellent, $42.50. .22 Stevens 416-2 heavy bbl. target sights, Mossberg scope, extra clip, sling, v. good, $39.95. Model 42 Winchester 410 pump, $49.95. 12 ga. Remington 31LA, 30" bbl., full, v. good, $69.95. 12 ga. Remington 31, like Hunters special, full rib, 32" full, v. good, $79.95. 12 ga. Winchester Model 24, 30" $54.50. 12 Ga. M-37 Ithaca, 28" modified, $69.95. 12 ga. Marlin O/U Model 90, $69.95. 12 ga. Husqvarna double barrel, compares to G. H. Parker cross locking, 27½" barrels, scroll engraved, new $95.00, 12 ga Parker V.H., little roughness in barrel, good, $69.00. 9 mm Star Copy of .45 Colt, $32.50. H&R 999, like new $38.00. .25 Duo auto, $25.00. Colt .25, $29.95. 7.63 Mauser Military, good, $32.50, .35 S&W, $32.50. .25 H&R automatic, $22.50. Brand new Lauson 1 horse motor, (boats, lawnmowers etc.) large speed range, double shaft, complete, $32.50 (exceptional buy!). Immediate delivery on new guns, send check or money order. Satisfaction always guaranteed. 25¢ brings our latest illustrated catalog with money saving "trade-in" feature. Numrich Arms Company, Dept. 8-H, Maroneck, New York.

PERFECT SINGLE ACTIONS: .32-20, .38-40, .41, .44-40, .45: $87.50. .38 Special, .44 Special $100.00. .357: $125.00. $40.00 allowed for your old SAA (over #160,000). Remit, allow two weeks. Davis, Box 491, Ft. Worth, Tex.

COLT 357 MAGNUM 6" EXCELLENT CONdition. $100.00 or best offer. Bill Robinson Schulenburg, Texas.

WINCHESTER #70, 220 SWIFT, TARGET Grade, fired 92 rounds; Lyman Super, coated, Dot 12X, both excellent, $225.00. Connie Malinowski So. Deerfield, Mass.

ONE 70 HORNET STANDARD THREE 4 Hornet Standard new, with Weaver K or scopes, Redfield Jr. or Weaver detachable mounts List prices. No installation charge. Postpaid Money order. Schreiber Sporting Goods, Aurora Indiana.

NEW MOD. 70 STANDARD $109.50. FEW Mod. 12 and others at list. Warring Sporting Goods, Sedan, Kansas.

LARGE COLLECTION ANTIQUE AND MOdern guns. Yearly series of lists 50 cents coin stamps. G. W. Stephenson, Monticello, Arkansas

---

PEARSON BULLETS

PRECISION MADE

Send for NEW LIST with Prices
PEARSON'S GUN SHOP
1180 College Ave. ——— Indianapolis 5, Indiana

LEATHER LENS COVERS

FOR ANY SCOPE

REGULAR AND STITH MOUNTED.....$1.75
FOREIGN & TARGET MODELS.....$2.00

At Your Dealer or Prepaid By

SWEET & CO. Box 447 Clovis, New Mexico

.22 HI STANDARD HDM TARGET POINTER stocks, thumb rest 3 clips Micrometer adj. rear perfect in and out. $65.00. G. W. Eilermann, Campus Station, Cincinnati 21, Ohio.

---

410 GA. DOUBLE EXCELLENT $58.00. REMington 25-20 cal. Model 25—Pump, V.G. 50 cartridges, $58.00. Winchester 16 ga. Model 12, V.G., $58.00. Winchester 22 cal. 61 New $49.95. Smith & Wesson 22 cal. 10 in target pistol, Holster, V.G. $40.00. Colts 38 Super Auto New $65.00. Winchester 12-32 Model 1897 New $69.95. Marlin Model 27 pump 25 cal. Rim Fire 100 Cartridges V.G. $49.00. Send Money Orders, Satisfaction Guaranteed. (Member) Frayseth's, Willmar, Minn.

WIN. .22 STANDARD BARREL CONVERTED to sporter. Lyman front, Redfield rear, sling. L 4X Weaver scope fitted with Litchert target attachment. Lehman mounts, refinished and reblued. Excellent for both hunting and target work. Excellent in and out. $75.00. C. W. Eilermann, Campus Station, Cincinnati 21, Ohio.

BULLETS ONLY, WINCHESTER MAKE, (not loaded cartridges, plentiful supply this time):—45 grain Hornet Soft Point or 25-20, 60 grain Hollow Point, $3.00 per hundred; 200 for $5.75; 500 for $13.50. 250-3000, 87 grain Pointed Soft Point, $5.25 per hundred. 32-20, 80 grain Hollow Point or 100 grain Soft Point, $3.25 per hundred; 200 for $6.25; 500 for $14.75. 35 Remington, 200 grain Soft Point, $5.75 per hundred. 405 Winchester, 300 grain Soft Point, $5.75 per hundred. Following bullets are Remington Make:—6.5 Mannlicher-Schoenauer, 150 grain Soft Point, $5.50 per hundred; 200 for $10.75; 500 for $25.00. 30-06, 110 grain Hollow Point or 8 m/m 170 Grain Soft Point, $5.50 per hundred; 200 for $10.75; 500 for $26.00. 38 Special, 158 grain Metal Jacket, Lead Bearing, per hundred $3.25; $26.00 per thousand. 44-40, 160 grain Hollow Point, $4.00 per hundred, 200 for $7.75. 45-90 (O.K. for 45-60 and 45-70), $7.75 per hundred; 200 for $14.50. New Empty Primed Shells, Winchester Only:—22 Hornet or 218 Bee, $5.00 per hundred; 200 for $9.20. .219 Zipper, $7.35 per hundred; 200 for $14.20. 220 Swift, 250-3000, 257 Roberts, $8.25 per hundred; 200 for $15.80. 30-06 or 8 mm, $8.50 per hundred; 200 for $16.40. Most Rifle & Pistol primers in stock, $6.75 per thousand. Most DuPont and Hercules Powders in stock, $2.00 per factory sealed canister. All bullets postpaid to you. All other items F.O.B. by express only. No C.O.D.'s, please send check or money order. Robert Haelig, Boundbrook, New Jersey.

LYMAN SCOPES, RELOADING TOOLS. Metallic sights, Unertl scopes all models Fecker, Texan, Argus and others. B & L Zephyr-Light Binoculars. Spotting scopes, Ray Ban Glasses. Liberal trades. Wholesale to Dealers and Gunsmiths. J. L. Vincent, Sporting Goods, Aud, Missouri.

ATTENTION POLICE DEPTS.—TWO-WAY mirror—used for observing suspects without detection of officers. 12" square, $17.50, delivered. Delivery date 20 days. Frank Svec, Box 42, Leonia, N. J.

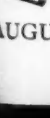
WINCHESTER 52 SPORTER STOCK, ENgraved butt plate has 2½ inch hinged trap, Whelen sling—excellent $35.00. H. F. Hill, 48 S. Poplar St., Hazleton, Pa.

SELL or TRADE

TRADE AMERICAN AND FOREIGN 25, 32, 380, 9 mm. automatic pistols for rifles, revolvers or what have you. List for stamp. Robert Abels, 860 Lexington Avenue, New York 21, N. Y.

---

22 WALTHER AUTO RIFLE, SPRINGFIELD fancy sporter, many others. Want 22-03, 32 Smith 63, 61, 62 Winchesters. Gowen, Biltmore, N. C.



PALMA COMPOUND

Penetrant, Lubricant, Inhibitor
BEATS 'EM ALL each way

FRED NESS *Selected*
Red Wing, Minn. *Supplies*

The Choice of Champions

Simmons Ventilated Ribs

FOR ALL GUNS — FOR ALL GAUGES

Automatics $25.00

Overs and Unders and Double Barrel Guns $35.00

Pumps with ramp on receiver. Top of receiver non-glare. Complete gun reblued $30.00

- Straight Sighting Plane
- Each Custom Fitted
- One Week Service
- Non-Cross Fire
- No Heat Waves
- It Floats

SATISFACTION GUARANTEED

3-DAY SERVICE ON CHOKES

Poly Choke Power Pac Cutts Comp Weaver Choke Shooting Master

DEALER INQUIRIES INVITED

Simmons Gun Specialties

1426 WALNUT **KANSAS CITY 6, MO.**

---

for precision... the K4 WEAVER SCOPE

K4 Scope $45.00

Write for folders on Weaver K Scopes, J Scopes, G Scopes, new Weaver Detachable Mounts, and Weaver-Choke.

W. R. WEAVER COMPANY, Dept. 1, El Paso, Texas

HANSON'S CUSTOM LOADING

We have been appointed distributor for the M & G Complete line of Bullets for the states of Kansas and Missouri.

RE-BLUING SERVICE

We can now give you quick service on complete Blu-Blak Re-Bluing on Rifles, Pistols & Shotguns

COMPLETE GUNSMITHING SERVICE

Military Conversions — Scopes Mounted
Rebarreling — Restocking

CUSTOM LOADING

Complete custom loading on all American calibers

6.5 Jap	100—129—154 Gr.	Box 20	$4.00
7.7 Jap	150—180 Gr.	Box 20	3.50
30 M-1	110 Gr. S.P.	Box 50	$5.00
257 Roberts	60 to 125 Gr. S.P.	Box 20	$3.00
6.5 Mannlicher, Rim	100-129-154 Gr. S.P.	Box 20	$4.80

Write for our new Circular—Stamp appreciated
Dealers inquiries invited

HANSON'S CUSTOM LOADING Box 427-R Bonner Springs, Kans.

EASTERN Wholesale Distributors

SPEER JACKETED RIFLE BULLETS

WESTERN & WINCHESTER CASES & PRIMERS

B&M, IDEAL, PACIFIC & UNIVERSAL

Loading Tools and Accessories
Sights, Telescopes, Mounts, Slings, Holsters, Gun Cases, Stock Fittings & other shooting supplies & accessories
Gunsmith's Machinery, Equipment, Tools, Supplies and Materials

Free list and discount sheet for listed dealers. List less discounts also free to shooters sending us name and address of local gundealer or gunsmith.

HARRIS SALES CO. LANSDOWNE, PENNA.

CASE TRIMMER

MODEL 490 ONLY $10.50

Holds Case RIGID — Improved Case Holder — Trims and Deburrs, Handles All Cases—Free Folder—Sold Through Dealers. C.O.D.? Yes!

G. T. SMILEY CO., Box 54, Clipper Gap, Calif.

LEAD WIRE for JACKETED .22's

3/16" or .200" diam. soft lead wire. 25 lb. spool $8.00, 10 lb. spool $3.70, 5 lb. spool $2.35 plus C.O.D. postage. Uniform diam., density gives uniform weight, trajectory. Write for quantity discount. CHECK OR MONEY ORDER. Money back if dissatisfied

ROCHESTER LEAD WORKS, Rochester 8, N.Y.

Lyman Metallic Sights

48 Series

LYMAN 48 SIGHTS, superbly designed, accurately constructed for game and target shooting.

- ¼ Minute Clicks
- Positive Adjustments
- Quick Slide Release
- Stayset Knobs for Hunting

LYMAN 48 SIGHTS designed for:

WINCHESTER 52, 54, 70
REMINGTON 30A, 30S, 301, 721, 722
ENFIELD 1917 U.S., 1917 British
MAUSER all models
SPRINGFIELD 1903, M1, M2, .22 cal., '30 .30 cal.
KRAG all models
BRITISH LEE ENFIELD and SPORTER

Lyman Ramp and Front Sight

THE LYMAN FRONT SIGHT HOLDER, RAMP STYLE, for remodeled rifles is easy to attach and position and has sufficient stock for reworking if necessary. The Ramp comes in four barrel sizes suitable for Enfield 1917, Mauser, Springfield, Krag and Russian rifles. Lyman Front sight No. 31 with 1/16" ivory or gold bead at $1.25 regularly furnished. Ramp price, $5.00, combination, $6.25.

Lyman Sight Catalog 10¢

LYMAN GUN SIGHT CORP., Middlefield, Conn.

NIEDNER BUTT PLATE

of

CHECKERED STEEL

The finest sporter Butt Plate made. Over 10,000 satisfied customers. Sharp, clean-cut checkering. Case-hardened for durability. Size: 1-9/16" x 5-1/8". $2.00 each.

GRIP CAP

Machined from a tough black material similar to horn. Will not chip or crack. Size: 1⅜" x 1⅞", 75¢ each.

Dealers write for quantity discounts.

We also stock a complete line of sights, scopes, reloading tools and other shooting equipment.

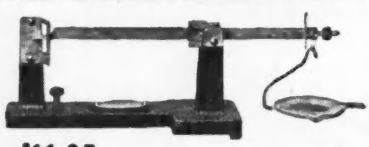
NIEDNER RIFLE CORPORATION

Route 5 • Niles, Michigan

REDDING

POWDER & BULLET SCALE

FAST-ACCURATE-DEPENDABLE



$11.95 Postpaid

Tenth grain accuracy with tenth grain over and under graduations—clearly graduated beam with self-aligning bearings—brown wrinkle finish base with leveling screw—325 grain capacity—no weights required. "You get it—just set it!" Folder on request.

Order thru your dealer or from—

THE REDDING CO.

BOX 524 CORTLAND NEW YORK

HIGH POWER TELESCOPE

60 POWER—ALUMINUM TUBES—OPENS TO 33"
Variable Power Eyepiece Adjustable to 15X, 30X and 60X.

$4.50

5 Sections. 4 Ground & Polished Lenses. Also used as 50X Microscope. Ready to use, only $4.50 postpaid.

BROWNSCOPE CO. Dept. 8A, 24 W. 45th St. NEW YORK 19, N. Y.

OWN A NEW CUSTOM

MAUSER RIFLE

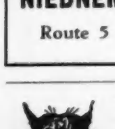
for as low as **$98.00**

For further information write to Dept. A-3

CLAYTON-MORGAN CO.

1351 Pennsylvania Ave., S. E.

Washington, D. C.



"You may quote me, your NOSHOC Recoil Pad is the best I have used, and put it in any publication you may select. I need two more for a shotgun and a 600 elephant gun. All the best . . . and will continue to recommend your good products."
See Page 65 ELMER KEITH
(E.K. now has NOSHOC pads on 7 of his personal guns. Elmer knows his pads. Do you?—H. TOM C.)

FRENCH WALNUT RIFLE STOCK BLANKS

Grade 1—Good Color, some figure $10.00
Grade 2—Well Figured $20.00
Grade 3—Selected Blanks, beautiful grain and Color $35.00

Can be furnished machine inletted and rough turned, $6.50 additional

Discount to Gunsmiths

PAUL JAEGER • Jenkintown, Penna.

EXCELLENT PLUS: MAUSER 8 MM (7.92) Sporter, Herter fancy stock, Redfield 70 MH rear, Marble-Sheard front, 180 rounds Winchester ammunition. $115.00. E. E. Waters, Bx 131, Cushing, Oklahoma.

RIFLEMAN, JANUARY 1927 TO DECEMBER 1948 inclusive. Want $60.00. Excellent automatic Colt .22 or 241 Remington. Morphew, 814 30th, Sacramento 16, Calif.

PURDEY 20 GA. HAMMERLESS EJECTOR: 1895 Winchester 30 carbine; Carl Zeiss 8x30 Wide Angle Deltrintem Binoculars: Beautiful J. P. Sauer 12 ga.x30-30 Three Barrel Hammerless; Original 5.6x61 Vom Hofe Mauser needs stock; 8x68 Mauser with Factory Cartridges. Vincent, c/o Antique Shop, 252 East 52, New York City.

WHY WAIT FOR THE MOB? ORDER YOUR custom sporting rifle or shotgun now, before hunting season. Many fine guns to choose from. Get on my mailing list—"Gun News" $.25 yearly. Sure I'll trade—write now—Ed. Agramonte, Harrison, N. Y.

WINCHESTER M70 TARGET SWIFT, NEW postwar; Targetspot. Want Hornet; K6. Harold Hopping, Cleves, Ohio.

NEW GUNS, POSTPAID. WIN. M/63 .22 autoloader, $63.50. Rem. M/ 121 .22 pump, $49.95. Rem. Streamlined Auto. 12 & 16 ga. $99.95. Rem. M/141 .35 pump, $104.95. Plainsman .22 air pistol, $12.95. Deluxe .270 on F.N. action, scope, etc., $148.00. Trades invited. Paul Heismann, Vista, California.

SMITH AND WESSON 35 CALIBER AUTOmatic pistol, perfect, one box ammunition $200.00 or will trade for 357 S W magnum not over 4 inch barrel or good motion picture camera 16 millimeter. James Utitz, Sheriff's Dept., Beaumont, Texas.

M70-250-257-270-375 MAGNUM, $109.50; M721-270-30.06, $79.95; M722-257-300, $74.95; M99EG-300, $96.45; M141-35, $104.95; M71-349, $91.10; Trade. Al Green, 415 E. Woodbine, Louisville, Kentucky.

FOR SALE OR TRADE, BEAUTIFUL PRE-War Imman-Meffrt 12 ga. Double, light weight, Italian Walnut, auto Ejectors, 29 I.C. & M., Scroll Engraving, Recoil Pad, Perfect, $250.00. New Remington Model 11, 20Ga. Sportsman, Poly Choke $100.00. New L. C. Smith, Field, 20 Ga. 28 F&M, $85.00. Perfect Win. 54 Hornet, New Whalen Sling, Box Ctgs, $85.00. Marlin 94, 32-20, Oil Finish, New 70 Redfield, Box Ctgs, Excellent, $47.50. French Light Weight Over-Under 16 Ga. 27 F & M, scroll engraving, beautiful wood, plain extractors, Very Good, $125.00. Will accept Browning Pidgeon O-U 12 or 20. Paul R. Lilly, Valdosta, Ga.

TRADE

HENSOLDT 8X42 ROOF PRISM COATED optics for spotting scope, 375 magnum or 22 hornet. Chris Zobel, 1428 Alice, Oakland, Calif.

TRADE—HOHNER PIANO ACCORDION, Brand New, Want fine gun or rifle, Emory Evans, (AR) Westminster, Md.

TRADE MOD. 37 REM. TARGET PERFECT in, good out for 70 Win. Hornet. Ike Gossett, Sweetwater, Texas.

HUNTING AMMUNITION: LOADING 125 calibers, including Foreign and Wildcats. Case forming specialist for 60 different calibers. List ten cents. J. W. McPhillips, 285 Mastick, San Bruno, Calif.

TRADE NEW PACIFIC SUPER LOADING tool, complete for any standard caliber, for a good Enfield, Springfield or Krag and $10.00. W. Joseph O'Connor, Baker, Oregon.

.22 CAL. BULLETS

Now Using Gardiner's Jackets as per write up in Rifleman, 42-50 Round nr sharp point; 55-60 sharp only, all 224, 65-gr. 227, copper $2.80, Lubri-Kate $2.90, postpaid.

MILO HILL Caledonia, Ohio

CHAMBERING REAMERS
$12.50 each

HAND HONED TECHNICALLY ACCURATE

No finer reamers for the purpose are available. Widely used by prominent gunsmiths and rifle enthusiasts, who appreciate the better shooting an accurate ammunition chamber provides. Fully guaranteed for consistent quality and long, satisfactory service.

Send for List of Available Calibers

FULLER TOOL COMPANY
3950 West Eleven Mile Road
Berkley • Michigan

WANTED

.41 REMINGTON, COLT DERRINGERS, also other Derringer pistols, freaks, oddities. Robert Abels, 860 Lexington Avenue, New York 21.

WANTED—OVER AND UNDER SHOTGUN, any make and gauge. Send complete description and price. Kerr's 9584 Wilshire Blvd., Beverly Hills, California.

ANY GUN OR PISTOL MADE BY COLT—Antique or modern. Describe fully, including all markings. Licensed state and federal dealer. Herb Glass, Bullville, New York. (20 miles west of Newburgh on 17K).

ANTIQUE PISTOLS, SINGLE PIECES OR entire collections. Wm. M. Locke, 3607 Ault Park Rd., Cincinnati 8, Ohio.

WANTED—FIRED, UNSIZED RIFLE AND pistol cases. Advise price, caliber and quantity available. J. Russell Lent, 23 Columbus Ave., Middletown, Conn.

WANTED—STOCK FOR 12 GA. MODEL 21. Winchester Bee or Zipper rifle. Jack Watts, Ooltewah, Tenn.

FAIR PRICES FOR 8MM MAUSER RIFLES, Luger, Walther, P38 and Colt single action pistols. Ship for inspection to Public Sport Shops, 11 S. 16th Street, Philadelphia 2, Pa.

WANTED, COLT NEW SERVICE 38 SPECIAL 6" barrel. Very good to perfect. Harry Parmenter, Gwynedd, Penna.

G-43 GERMAN AUTOMATIC RIFLE STOCK complete with gas chamber cover. C. G. Nickell, 244 Taylor Avenue, Nacogdoches, Texas.

WANTED, ITHACA 10 GAUGE MAGNUM double barrel. E. G. Menelaus, Blockton, Iowa.

WANTED—COLT AND REMINGTON PERcussion revolvers poor to fine shape. Robert Abels, 860 Lexington Avenue, New York 21.

SPRINGFIELD U.S. RIFLE CAL. 22 M 2 EXcellent or better. G. O. Winston, Box 1, Hart, Michigan.

FOUR BARREL GUNS: DOUBLE RIFLES: Colt New Service, foreign 22 single shot and automatic pistols triple lock regular and target. Vincent, c/o Astore Bldg., West Stockbridge, Mass.

WANTED—THE FINEST SHARPS AND BALlard Target Rifles in the U.S. Especially fine factory original & engraved jobs. Guns made up by Pope, Schoyen & Zirchang desired. Want real fine Long Range Creedmoor Target outfits, complete with tools. Also want 16 lb. Sharps Buffalo guns especially in 40—90—3¼" straight cartridge. Describe completely. M. C. Clark, 1434½ Greenfield, West Los Angeles 24, Calif.

SPRINGFIELDS AND ENFIELDS AS issued, fair to excellent condition, state price, condition, serial number. Walter Bahr, Big Fork, Montana.

WANTED—WOODWARD OR BOSS UNDEROver duck gun. F. A. Work, North Liberty, Iowa.

WANT NICE GUNS, ALL KINDS, MAKES and models, if priced reasonably. Give details, lowest price. Gibbs & Gibbs Sporting Goods, 2539 Times Boulevard, Houston, Texas. Federal Dealers.

PRONTO CLEANER . . . the wizard in cleaners . . . for the gun shop that demands better - than - the - best. Users call it "A BEAUTIFUL CLEANER." Cleans in one to five minutes. Requires one tablespoonful to the gal. water. Price: gal. $5.00, pint $1.00.

Lynx Line

See Page 65

SIERRA RAMPS

Springfield	½" height
Enfield	7/16" height
Mauser	⅜" height
Sporter	5/16" height
Lo-Sporter	¼" height

#6-48 screw included $2.25 each

BEADS

Fit all Sierra Ramps. Marble Beads, #57 Gold & Ivory and King #17F3 Gold Bead, $1.25 each. Marble Sheard #57 Gold Bead, $1.75 each.

GAS CHECKS

8 mm, .32, .30, .270, .25, .22 Caliber.

$1.75 per 1000

JACKETED BULLETS

	Price per 100
30 Cal. Soft Point Spitzer	
125 gr. Varmint type	$4.25
150 gr. HV	4.50
180 gr. HV	4.75
25 Cal. Soft Point Spitzer	
87 gr. HV	3.75
100 gr. HV	3.85
117 gr. HV	4.00
22 Cal. Soft Point Spitzer and Semi-pointed 45, 50, 55 gr. HV	2.75
22 Cal. Soft Point Hornet—.223 and .224—40, 45 gr.	2.25

FREE Write for sample jacketed bullets. Please state caliber and weight. Prove to yourself that these are the finest you've ever used.

All items postpaid. See your dealer first.

HARRIS MACHINE COMPANY
9212 EAST BERMUDEZ • RIVERA, CALIFORNIA

SHOOTING ACCESSORIES

For .30 Calibre	
O'Hare Micrometer, slightly used	4.00
O'Hare Locking Front Sight Cover	1.25
O'Hare Rear Sight Cover	1.25
Champion Score Book	1.00
Parker-Hale one-piece Cleaning Rod	3.50
Bronze Brush .35—Bristle	.45
Winchester M/70—30-06 Target Grade	166.95
Winchester M/70—270 Target Grade	166.95
Win. M/70—30-06 Super Grade, regular sights	162.50
Win. M/70—270 Super Grade, regular sights	162.50
Parker-Hale Rubber Elbow Pads, pair	6.75
10-X Shooting Coat	15.00
For .22 Calibre	
Remington M/37, complete with sights	118.60
Winchester M/52, heavy barrel without sights	96.85
Winchester M/52, standard barrel, no sights	86.35
Junior Target Rifles	
Remington M/513TR	57.00
Remington M/521TL	36.95
Winchester M/75	57.00
Winchester M/69	37.20
Mossberg M/144, new target model	27.90
Mossberg M/46B	23.90
Mossberg M/46M	27.95

Other Mossberg Models in stock.
.22 Calibre Ammunition, Match and Regular brands, always fresh at special Club price. Send for price list.

P. J. O'HARE
Largest Manufacturer and Importer of Shooting Accessories in America
552 Irvington Avenue Maplewood, N. J.

BRAND NEW! Precision made by Carl Zeiss, world famous German binocular manufacturer. Designed for rapid, accurate anti-aircraft observations. Ideal today for daily range use, tournaments, marine use, lookout points, fire wardens, etc. Full 10 Power with 80 MM objective lenses (about 3⅛" in diameter)! 17" long, 22" high, 19" wide. Weighs 19 lbs. Shipped in strong wooden storage box. Originally cost $750.00. Our price only $150.00 plus 20% Federal tax F.O.B. Chicago. C.O.D.'s require $10.00 deposit. Deliveries August 25. SUPPLY LIMITED. United Products Co., 7941 S. Halsted, Dept. ARF-3509, Chicago 20.

Sell • Buy • Repair Any Gun!

LUGER SERVICE and PARTS

• We have Luger, Springfield, Enfield and Mauser parts, and parts for most foreign pistols.

. . . SEND FOR FREE LIST . . .

New Luger 7.65mm 35/8" Barrels	$12.00
Old style Luger flat main spring	4.50
Perfect rebuilt Luger Pistols 7.65 or 9mm	55.00
New Mauser Military 7.65 or 9mm Bolt Spring	1.75
Mauser HSC firing pin and spring	4.50

• WANTED: Luger mag and side plates. Walther P-38 and PPK parts, or any foreign parts. Browning and Remington o/u shotguns. Cash or Trade only.

SERVICE ACCEPTED ON
• FOREIGN PISTOLS

WESTERN GUN EXCHANGE
441 S. Greenleaf Ave., Whittier, Calif.

GUN BOOKS OLD AND NEW

Any book that is advertised or reviewed in THE AMERICAN RIFLEMAN—also many out of print titles. Send 25¢ for big illustrated New Arms Book catalog—prizes—and special offerings. FREE BOOK WITH EVERY TWELVE.

RAY RILING—Arms Collector Service
6844 Gorston St., Philadelphia 19, Pa.
1949 "New" Book Catalog 25¢
1949 "Used" Book Catalog 50¢

• • • FIREARMS INTERNATIONAL •

• FN MAUSER ACTIONS •

for the finest in custom rifles

These actions are currently manufactured by the famous Fabrique Nationale in Belgium, and have all of the modern features demanded by advanced American shooters.

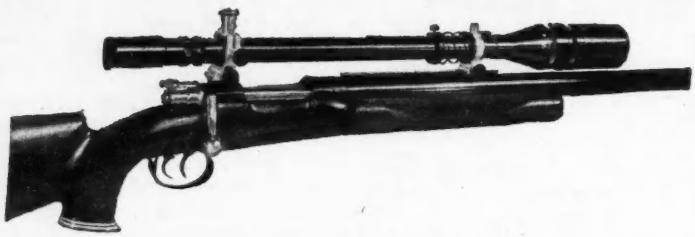
You no longer need accept wartime actions with makeshift alterations.

Order Now for Prompt Delivery—Single trigger or double set triggers

For additional information write to

FIREARMS INTERNATIONAL CORP.
1526 Connecticut Avenue
• Washington 6, D. C. • • •

2" UNERTL Target Telescope



To meet the demand for extremely great light gathering and high magnifications. Available in 10, 15, 18, 20 and 24X with ¼ minute click mounts and bases. Priced complete $125.00. Especially suitable and highly recommended for test and bench rest shooting. For our Target, Hunting and Spotting scopes, accessories or parts, see your dealer or write us:

JOHN UNERTL OPTICAL CO. 3551-55 East St. Pittsburgh 14, Pa.

BULLETS

Dia.	Type	Make	Gr. Wt.	Per "C"
.223"	S.Pt. Hornet	Sierra	40 & 45	$2.25
.224"	S.Pt. Hornet	Sierra	40 & 45	2.25
.224"	S.Pt. Spitzer H.V.	Sierra	45, 50 & 55	2.75
*.224"	S.Pt. Rd. Nose H.V.	Sierra	45, 50 & 55	2.75
.228"	S.Pt. Semi-Spitzer	M & G	70	4.00
.257"	S.Pt. Semi-Spitzer	M & G	60 & 87	$4.00 & 4.20
.257"	S.Pt. Semi-Spitzer	M & G	100 & 117	$4.40 & 4.60
.257"	S.Pt. Semi-Spitzer	M & G	125	4.80
.257"	H.Pt. Spitzer	Collins	87	4.20
.257"	S.Pt. Spitzer	Collins	100 & 117	4.20
.257"	S.Pt. Spitzer	Sierra	100	3.85
.263"	S.Pt. Spitzer	Ebel	120	4.50
.263"	S.Pt. Semi-Spitzer	M & G	100	4.50
.263"	S.Pt. Semi-Spitzer	M & G	129 & 150	5.00
.263"	S.Pt. Rd. Nose	M & G	139	5.00
.308"	S.Pt. Semi-Spitzer	M & G	110 & 125	$4.40 & 4.80
.308"	S.Pt. Spitzer	Sierra	150 & 180	$4.50 & 4.75
.308"	Semi-Spitzer	Auert	150	4.50
.308"	S.Pt. Spitzer	Auert	180	4.75

* Match Grade in 50 & 55 Gr. weights.

Also M & G in .270, 7 M/M, .30 & 8 M/M Cal. In stock in most calibers & weights. Redding Scales, Lyman & Hollywood Loading Tools in stock. Write for price list or order now.

CUSTOM GUNSMITH SERVICE

10320 Stagg Street Sun Valley 3, Calif.
(Sun Valley was formerly the city of Roscoe)

MASHBURN

POSITIVE ZERO MOUNT

Dependable, sturdy, will not shoot loose. For most Rifles $15.00. For Challenger Scope $17.50. Extra bases $6.50.

SUPERIOR TRIGGER

Adjustable, light pull, no creep. Mauser, Springfield, Enfield, Rem. M-30 and 720. $15.00.

SUPER GUN STOCK FINISH & FILLER

$1.00 Each, POSTPAID. See your dealer or order direct.

FINEST Custom RIFLES

MASHBURN ARMS CO.
1220 N. BLACKWELDER
OKLAHOMA CITY, OKLA.

LIGHT WEIGHT SPORTING RIFLES

.257, .270 and .30-06 Calibers, using new F.N. Mauser Actions. Also conversions on your action. Enfields rechambered to .300 H&H Magnum
Write for description and prices.

$8.50
Express
Collect

Your **RIFLE BOLT** and extractor
Engine Turned and Polished
Beautifully chased engine-finish; with indexing both ways, as illustrated. All surface blemishes removed. Bolt handle and firing pin nut highly polished.
Knurl band, ⅜" wide, on round bolt handle knobs ---------$3.00

BAYSHORE GUN WKS. Rt. 1, Box 473K Mountain View, Calif.

HIGHEST GRADE OVER & UNDER AND double shotguns & rifles. British manufacture preferred. Also, 410 –28, or 20 gauge Parker grade DHE or better. Grant Pierce, Bald Mountain, Maine.

WANTED FOR CASH—ANTIQUE PISTOLS, rifles, edged weapons, armor, collections or single pieces. Robert Abels, 860 Lexington Avenue, New York 21.

WANTED: 2"-20X UNERTL SCOPE COMplete. Pay cash. Don M. Bertolette, 4310 11th Ave., Sacramento 17, Calif.

FRONTIER COLTS, IN GOOD SHAPE, ALSO fancy ones, ivory grips. Robert Abels, 860 Lexington Avenue, New York 21.

WANTED: NEAR PERFECT WALTHER H.P., at your price. Write details. George Wilson, Federal License #7785; 456 Burnley Lane, Drexel Hill, Pennsylvania.

MODEL 70 ACTION—35 REMINGTON, 375 Magnum 38 Officers Model. J. Rich, 15 E. Washington Street, Bradford, Pa.

COMMERCIAL WAFFENFABRIK MAUSER short action: Newton Arms Company catalog. W. T. Moyers, Ernest & Crammer Building, Denver, Colorado.

ENGLISH DEELEY-EDGE PATENT UNDER lever single shot. Lee Harthan, Thornton, Iowa.

COLT OFFICER'S MODEL .32 CAL. MUST be perfect. Walter M. Snoden, RFD 1, Plainfield, New Jersey.

WE WANT YOUR FINE SHOTGUNS AND antique pistols, 1 or 100! The rarer or fancier the better. Price no object if guns are fine. State price and description first letter. No offers. Buy, sell or trade. Guns Inc., 24 Queen's Buyway, Falmouth, Cape Cod, Mass.

WANT: 22 SHOT, ACE, SCHMIDT DIES. Arthur Moss, 1136 Montana, Chicago, Ill.

SCOPES, BINOCULARS SIGHTS & CAMERAS

BINOCULARS TRADING POST. SPECIAL —Zeiss pocket size Telita 6x18, coated, $115.00. Also B&L, Sard, Universal, and Zeiss standard models. Liberal trade-in allowance. Also guaranteed reconditioned binoculars, $25.00 up. Send for free list, and see next ad. Mirakel Repair Co., Mount Vernon, New York.

BEFORE BUYING A BINOCULAR READ our booklet "The Inside Story of Binoculars"—how to choose, use and check a binocular. An American Rifleman reprint, 25¢ postpaid. Mirakel Repair Co., Mount Vernon, New York.

BINOCULARS, FIELD GLASSES, REpaired, hardcoated. Accurately aligned by Collimator. Prompt service. Mail instrument for free estimate. Binoculars bought, sold, traded. New Cases available. Rochelle Optical Company, 28 Cliff Street, New Rochelle, N. Y.

TELESCOPES, BINOCULARS, MICROscopes,—big bargain catalog free. Brownscope Company, 24 West 45th Street, New York.

THE NEW (Pat. Pend.) FLEX-ROD

EMERGENCY FIELD CLEANER

Every hunter needs one. Carry in your pocket. PUSH through breech to remove snow, dirt, water, etc. Leaves barrel and action clean. One rod fits all bores 22 to 12. $1.00 Postpaid. Discount to dealers and clubs. CORRIELL'S GADGET SHOP
Summerville, Ore.

Colorado

HAND MADE HOLSTERS
"Masterpieces by Western Leather Craftsmen"
See your Dealer or write us.
COLORADO SADDLERY CO.
1527 18th St. Denver 2, Colorado

The "MARTY" Clip Loader

for Colt, Woodsman and Hi Standard automatics. This fine accessory HOLDS clip open while you load. Chrome plated with chain and ring—list price $2.50. Send for free circular.

Dealer and Jobber Inquiries Invited
SOUTHWEST CUTLERY & MFG. CO. INC
1307 Olympic Blvd., Montebello, Calif.

RIFLE BARRELS

unturned, preturned and finish fitted in cals. .22 to .375. Best chrome-moly steel, double heat treated. Deliveries on barrels, one to three weeks; on finished barrels fitted, two to four weeks. Attractive discount to dealers. See my April ad. Ask for folder describing my BORE HONED barrels.

G. R. Douglas, *Life Member*
Rt 3, Box 297-A CHARLESTON, WEST VA.

INVENTORS

When you are satisfied that you have invented a matter of value—write me, without obligation, for full information on what steps you should take to secure a Patent.

PATRICK D. BEAVERS
(Formerly RANDOLPH & BEAVERS)
Registered Patent Attorney
904 Columbian Building, Washington 1, D. C

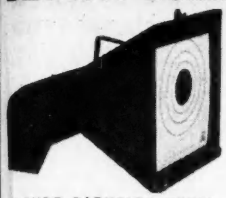
Proved for 25 years
Genuine BULLS-EYE SHOOTING KIT
Surprisingly accurate! Become an expert at home. Rubber band power shoots over 3500 No. 6 shot for $1. Complete kits $3.50 to $5 at dealers or write.
BULLS-EYE MFG., Fay Ave., La Jolla, Calif.

CUSTOM STOCKING

Military conversions. Am tooled up for most sporting calibers. Beautiful Bluing a specialty. Light weight sporting rifles. Fine walnut stocks.

W. L. GARTMAN
12 Richfield Ave. Cranston 10, R. I.

DETROIT BULLET TRAPS



USED EXCLUSIVELY BY Ed McGivern and Claude Parmelee

Detroit Bullet Traps are compact, simple, inexpensive and provide highest efficiency without the use of sand or waste. Ideal for .22 caliber rifles and all pistols and revolvers.

CLAUDE PARMELEE MODEL, 16" x 16" x 55 lbs. $25.00 FOB Detroit.
STANDARD MODEL, 12" x 14" x 37 lbs. $16.00 FOB Detroit.

DETROIT BULLET TRAP COMPANY
4660 LYNDON AVE. DETROIT 21, MICH.

PRISM BINOCULARS—FINEST U.S. GOV'T. optics. Huge 50mm. coated objectives. Less than half price: 7x50mm $79.50; 10x50mm. $89.50; 12x50mm $92.50 plus tax, prepaid. Literature on request. DuMaurier Binocular Mfrs., Dept. 195A, Elmira, N. Y.

CASH ONLY, BINOCULARS, 7x50 BY National Instrument Corp. Coated, Carrying case. (New, never used). Examination privilege $100.00. F. A. Jett, P.O. Box 1654, Indianapolis, Ind.

BINOCULARS. NEW - FEATHERWEIGHT Leitz, Hensoldt, Sard. Hensoldt Riflescopes, Binocular trade-ins considered. "Langguth", 1901 Taggart, Boise, Idaho.

SCOPE BARGAINS—WHILE THEY LAST: Noske 2½X post or crosshair and 4X Post $40.00. (Retail $54.00). Maxwell-Smith G-88 2½-X crosshair or post $30.00 (Retail $50.00), post with dot $35.00 (Retail $55.00). Maxwell-Smith Vectra 2½-X crosshair $20.00 (Retail $29.95). All brand new latest models coated lenses. This is your chance to purchase excellent hunting scopes at less than dealer cost. J. A. Biddison, R.D. 2, Malvern, Pennsylvania.

SIGHTS—RETAIL AND WHOLESALE. WE believe that we have the largest and most complete stock of all makes of sights, scopes and mounts in the United States. Write us regarding your sight problems. Dealers inquiries invited. Original Sight Exchange, Box J, Paoli, Penna.

BINOCULARS REPAIRED AND COATED. Alignment corrected to 1/1000 on our special collimator. Send for our free leaflet "Those Hard-Coating Jobs," and 25¢ for our American Rifleman reprint "The Inside Story of Binoculars." Mail your glass for free estimate. Cases available: 7x50 and 10x50, $7.50; 6x and 8x, $5.50; also made to order. Established 1925. Mirakel Repair Co., Mount Vernon, New York.

YARD 20X SPOTTING SCOPE, ADJUSTable stand, trunk case. Coated optics throughout. Unusually fine definition and great resolving power. Condition perfect. Cost $150.00, take $95.00. Inspection privilege. Roy Gradle, Life Member, 205 W. Islay, Santa Barbara, Calif.

WHOLESALE—RETAIL COMPLETE STOCK of American and Foreign Hunting, Target, and Spotting Scopes, All makes of Mounts, Iron Sights, Binoculars, Rifles, Shotguns, Pistols. We're Swappers! Send us your old Binoculars, Scope, or Guns and tell us what you want. List 10¢. Livingston Shooters' Supply, East Corinth, Maine.

TELESCOPES — THREE INCH COATED lenses, prism erectors; 34 power, tripod, $150.00; 24 power, $100.00; 20 power, $75.00. Frank Morrissey, 8032 Ney Avenue, Oakland, Calif.

WRIGHT INSTRUMENT REPAIR. BINOCulars — Transits — Levels — Microscopes — Telescopes—Repaired Adjusted—Posts—Crosshairs installed. 6418 So. Central, R 5, Bx. 494 BK, Phoenix, Arizona.

BRAND NEW $29.95 MAXWELL-SMITH Vectra Scopes. Coated Lenses. 2½X Crosshair. While they last. Only $18.95. Mershon Co., Inc., 511 East Broadway, Glendale 5, California.

ARGUS SUPER SPOTTING SCOPE, TRIPOD, silver plated clamp ring, new condition $65.00. Postpaid. Fred Tarantino, 2915 La Salle Ave., Bronx, N. Y.

Shot Shell Wads

10, 12, 16, & 20 ga. per 1000 post paid

⅜" Special Fibre Wad (Felt type) $3.95
¼" Special Fibre Wad (Felt type) 3.45
.135" Nitro Card for over powder 1.95
"B" Card Wad for over shot 1.75

Alcan Paper Co. ALTON, ILLINOIS

REDFIELD

Micrometer
RECEIVER SIGHTS

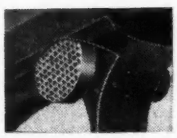
NO. 70 FOR REMINGTON SPORTING RIFLES

Acclaimed the world over as the most accurate, rugged, dependable gunsight made. Adjustments for both windage and elevation are extremely accurate and uniform with absolutely no back-lash or lost motion. Dustproof steel ball clicker system. There's a REDFIELD SIGHT for most Remington models, as well as for most other standard rifles. Get more accuracy from your own gun—see your dealer or write for free folder giving make and model of rifle.

REDFIELD GUNSIGHT COMPANY, 3313 Gilpin St., Denver, Colorado

SUPERIOR HOLSTERS AND BELTS

S. D. MYRES SADDLE CO.
EL PASO, TEXAS
Write for Catalog



"BIG HEAD" SAFETY FOR WINCHESTER MODEL 12

Fits all gauges, right or left hand available. Fast, certain. No fumbling—even with gloves. Simple and easy to install. **$2.95**

A-B ENGINEERING 4383 N. Sawyer Ave. Chicago 18, Ill.

1903 SPRINGFIELD FIRING PIN RODS

Reverse type, KNURLED HEAD ONLY. Price includes reverse safety. Send a dollar for both parts. **$1.00** Postpaid

We have no other rifle parts.

PARKER-WHELEN Co. Inc. Wash. 5, D. C. 827 14th St., N.W.

TOM PADGITT, Inc.

- Routledge targets, traps and Bustible Bullseyes for Boy Scout camps.

Gunsmithing Inquiries Invited
Approved Remington Repair Station

423 Franklin Waco, Texas

JAP 31

Makes safe, lightweight deer rifle. 30-06 or 300 Savage Caliber. I refit barrel, rechamber, headspace, alter magazine, cut stock to Sporter, and TEST FIRE—$16.00. 25 cal. to 257 Roberts $16.00. Your barrel fitted $16.00. Ship prepaid. Two weeks service.

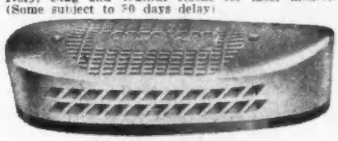
GARTH SLOAN *Gunsmith* 1022 West Slauson Ave. Los Angeles 44, Calif.

POINTER STOCKS

Molded plastic in ivory, walnut or ebony for old model Colt Woodsman, all .22 Hi-Standards, Colt and S&W Revolver Models. Colt .45 Auto. All dark colors $6.50; all ivory colors $7.00. We are originators of plastic thumb rest stocks.

POINTER PUPS

Plastic imitation stag without thumb rest for most of the above models $4.00 pr. We also have without thumb rest genuine Pearl, Ivory, Stag and Walnut stocks for most models. (Some subject to 50 days delay)



POINTER PADS

A new design recoil absorber, finest quality, three styles—two sizes—three colors. $3.25 each. Direct, if not at your dealer's.

Clear Sight Scope Lens Caps

Pat. Pend.

Optical glass lens and Neoprene bodies protect scope lens from excessive or hurried cleaning, oil, moisture, dust, shocks, scratches. For all popular hunting scopes—$2.95 pr. Direct if not at your dealer's. Free Illustrated Circulars.

WE DO NOT SELL GUNS

SOUTHWEST CUTLERY & MFG. CO., INC.
1307 Olympic Blvd. Montebello, California

ARE YOU TRIGGER HAPPY?

IF NOT, SEE YOUR GUNSMITH NOW!

The Mark II Trigger will give you a sweet bolt action on your Enfield *plus* a smooth, crisp trigger. Also fine speed-lock triggers for your Springfield or Mauser for $15, or single stage triggers for all three at $12.50 each. If your dealer doesn't have them, send us his name and address. Liberal discounts to gunsmiths and dealers.

DAYTON-TRAISTER CO.
34 SE 66th Ave. Portland 16, Ore.

ENFIELD OWNERS

YOUR ENFIELD REBUILT

Clark Speed Action jobs—cocks on opening, firing pin fall shortened with extra heavy mainspring, bolt sleeve built up to eliminate sloppy action, single stage trigger adjustment with slack removed, headspace checked. A complete job on your action, tested and proven since 1938—$15.00.

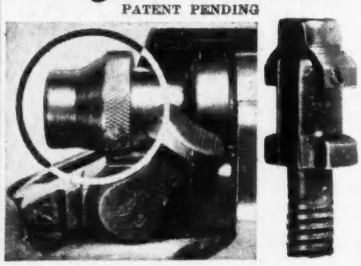
Precision grind ears	$5.00
Straighten guard and reduce mag.	5.00
Shorten barrel and crown muzzle	3.00
Alter bolt face and mag. for magnum	15.00
Re-barrel (Pfeifer blanks) to .257, .270, 30-06, Miser mag. 30-06, 300 H. & H., in white	35.00
Re-blue complete rifle	10.00
Re-stock, Monte Carlo, figured wood	45.00
WEAVER SCOPES IN STOCK	
K 2.5 with coated lenses	$37.50
K 6 with coated lenses	48.50
K 4 with coated lenses	45.00
Extra for Lee dot	8.00
Scope Shades (Blue Steel)	2.00
Clear-Sight Lens Caps, pair	2.95
Stith Q. E. D. mounts	17.50
Weaver U Mounts	6.75
Stith Install-it-Yourself mounts	15.00
King-Pike Mounts	17.50
Redfield Jr. for K scope	16.50
Echo	17.50
Pachmayr	20.00
No mounting charge if I furnish scope & mount	
Semi Buckhorn installed on Enfield with barrel band	6.00
Redfield hooded ramp with bead	9.75
Redfield 70 (Hunter Knobs)	9.50

All sights mailed postpaid

Are YOU still betting your eye-sight that you will be lucky?

THE *Clark* EYE SHIELD

PATENT PENDING



is made for YOUR protection. Smart shooters in 48 states used it last season.

Let Me Install An Eye Shield On Your Enfield Bolt Sleeve, and Return to You Postpaid . . . $5.00

You Must Be Pleased, or Your Money Back

Want to save $1.00 by installing it yourself? Send accurate micrometer reading from outside diameter of your bolt sleeve. Simple instructions will be enclosed with your Eye Shield. Postpaid $4.00.

Illustrated Price Sheet on Request

KENNETH CLARK, Madera, Calif.

Life Member N. R. A.

River Route — On Yosemite Valley Highway

TARGET & VARMINT SHOOTERS' SUPPLIES

TARGET EQUIPMENT: Match Ammo.—Win., West., Rem., Peters; New Win. M/52 H.B. (less sights) $96.85; New Rem. 37 Rangemaster (less sights) $98.45; Sights—Redfield Oly. "Factory Seconds" Coats $17.50; Vaver W11AT $7.50, rear $20.00; Goss Super Vision front $8.00, rear $14.50; Lyman Super Targetspots 12-15-20X $90.00; B&L 60mm Spotter $95.00; Super Argus 20X $74.50; Satura Scout 20X $25.00; K-T Scope Stand $15.00; Badger Deluxe Kits $12.85; Handyboxes $1.25; Freeland Gloves $3.75; 10X Imp. Coats $15.00—Gloves $4.00; Croft "Factory Seconds" Coats $7.25—Gloves $3.00; Myer's Cuffs $3.50 to $7.00—Slings $3.00 to $5.50; Sam Bond Cuffs & Slings $6.50; Boyt Gun Cases $4.95 to $11.75; Cleaning Supplies. Many other items.

RELOADING EQUIP.: Banta .22 Cal. Bullet Dies $40.00, core cutter $5.00, core seater $4.00; Pacific Super Frame w/toggle & handle for making bullets $22.85; Pacific, Lyman, B&M & Wilson Tools; Redding Powder Scale $11.95; Saeco Powder Measure $14.50; Bullets—M.G.S. .228, .257, .270, .30 & 8mm Cal.; Sisk 45 Gr. H, 50 Gr. L, .223 & .224, 42-49-55-63 Gr. Exp. .224; Sierra 45-50-55 Gr. .224; DuPont Powders; Win., West., & Rem. Primers. Some empty primed cases available; G&H Lovell $5.50 per C.

(Retail Only) Write for complete list and prices.

R. W. SPROWLS 1600-7th Ave., S.E. Cedar Rapids, Iowa

FOR PEEP SIGHT EFFICIENCY!

$3.50 for most Peep Sights

Direct Hits with a Merit Iris Shutter Eye Piece—Your Choice of 12 "click" adjusted apertures "INSTANTLY CHANGED" to suit your own vision while aiming. Clean kills, less wasted shells—perfect, clear definition immediately! Free folder.

MERIT GUNSIGHT CO., Dept 8R
6144 Monadnock Way — Oakland 5, Calif.

GUNSMITH'S eight assorted individually handled chisels and gouges with tool stand $20.00
DELUXE chisel set and gouges with eight sharp interchangeable cutters, sharpening stone in attractive wood chest $12.50

Order from dealer or direct

HAGEN ENGINEERING, Dept. H
5211 S. Monitor, Chicago 38, Ill.

HENSHAW

The ORIGINAL TRIGGER SHOE

Made for most rifles and pistols. Order direct or through your dealer.

Price $2.00
HARVEY E. HENSHAW
Shooters Supplies — 818-820 Oakwood St. Pittsburgh 21, Pa.

RIG NO MORE GUN RUST

Yes—you too can end rust worries once and for all with RIG! It's the SURE protection for rifles, pistols shotguns, even in moist, tropical climates and salt sea air. Eliminates frequent cleaning. 2 minute application after day's shooting is all you need. Guns "RIGGED" for storage stay good-as-new for years. Buy RIG at your gun store. Tubes 25¢, ¼ lb. cans 50¢. Write for new Free Gun Care Guide today!

RIG PRODUCTS COMPANY, OREGON 2, ILLINOIS

GO-WAD SIZER AND LUBRICATOR

The *precision* sizer and lubricator that leaves grease in the bullet grease-grooves, and nowhere else, leaving clean bases and crimping grooves. Made of sturdy Meehanite. Dies are tool steel. 1000 bullets per hour. Write for folder which completely describes the construction and operation of this rugged, highgrade tool. $35, furnished set up for one bullet. Other dies & plungers $3.00.

L. E. WADMAN
4 Morning Sun Avenue
MILL VALLEY • CALIF.

UNERTL 10x1 INCH TARGET SCOPE Excellent $46.00. 10x1½ inch Excellent $72.00, 8x Jr. Targetspot excellent $50.00. All Coated, Postpaid. New Target Scopes slightly higher. S. A. Wentling, Palmyra, Pa.

HENSOLDT 7X56, 8X56 OR 6X42 DIALYT Roof prism CF $89.00. Dienstglas Leitz, Zeiss, Hensoldt 7x50 or 10x50 $85.00. Zeiss or Hensoldt 6x30 $49.00. All Featherweight optically guaranteed. Special. Navy 7x50 coated, Excellent $69.50. Art Cooke, Darby 1, Penna.

AUGUST SPECIAL: STAURN SCOUT 20X Spotters, Coated, $17.50 postpaid. Brand new. Satisfaction Guaranteed. S. A. Wentling, Palmyra, Pa.

NEW HUBALEK 1-¾ INCH TELESCOPE sights, the finest made, coated, 16 and 20 Power $90.00. Fully guaranteed. Hubalek, 1165 Myrtle Ave., Brooklyn, N.Y.

VEST-POCKET COATED, 7-OUNCE 6-POWER all-purpose Mikron prismatic binocular. Newest post-war design. True 6-power; 1F; magnesium fluoride hard coat. Objectives: 15 mm. For hunting, mountaineering, sports, theater, etc. Each glass individually examined by our engineers for collimation, definition, etc. Quick-action zipper case: ¾ ounce. $39.95, delivered. ($39.95 uncoated.) Add 10% West of Mississippi River; add 20% excise tax. Check or M.O. Allen Rhode, Importer, Box 3224, Catonsville 28, Md.

NEW 6X30 BINOCULARS ARMY M3, Coated, Case Straps, $48.50, New 7x50 Navy Mark 32 Coated, Case Straps $78.00. New B. & L. 6x30 commercial, C.F. Standard Weight. $90.00. Add 20% tax. Real Bargains, 10 Day return privilege. S. A. Wentling, Palmyra, Pa.

COATED 'SCOPES, K2.5, $30.00. K4, $36.00. Texan $41.00. Hensoldt Binoculars 8x24, $85.00. Trades. Ervin King, 140 Portage, Kalamazoo, Mich.

WEAVER SCOPES, FACTORY NEW, LATest Models, "K" Scopes have covered click adjustments: K2.5 Coated $30.50, K4 Coated $36.50, K6 Coated $39.25, Rangefinder $5.00, Dot $7.00. 12.5 $19.00, J4 $23.50, Weaver Detachable Mounts $8.50, Alaskans $52.50, Hawk $47.00, Argus Spotters $59.50, Mark 245 $65.00, B. & L. 60mm $85.00. All new, Postpaid. Write for complete bargain list: Scopes, Mounts, Binoculars. Satisfaction Guaranteed. S. A. Wentling, Palmyra, Pa.

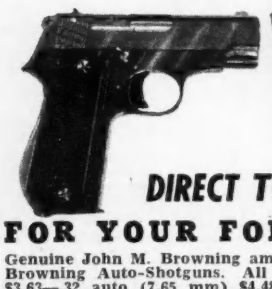
YOUR BINOCULARS RECONDITIONED, Cleaned and Aligned, for only $12.50. Binocular Parts any Make. Art Cooke, Darby 1, Penna.

COMPLETE REPAIR SERVICE—BINOCULars, Field Glasses, Telescope Sights, Transits, Levels, and Microscopes, Optics Hardcoated. Post or cross hairs installed, Refinishing and Bluing. Write or send instrument for estimate. Prompt Service, Workmanship guaranteed. Optical Instrument Repair Co., 579 Avondale Ave., San Antonia 10, Texas.

SCOPE, SPOTTING, GERMAN ARTILLERY, 10x80, inside filters, individual adjustable eye, angle vision, adjustable eye width, with tripod, perfect condition, market value $150.00. Sell or trade, give offer. Want M1 Garand with sales slip. Julius Stadsklev, 343-5th Avenue North, Hopkins, Minnesota.

NEW SCOPES AND MOUNTS, I HAVE A full line at the very lowest prices, list for a post card. Gerald McNutt, 389 Champion, Battle Creek, Michigan.

PISTOL AMMUNITION AT WHOLESALE



DIRECT TO YOU

FOR YOUR FOREIGN OR U. S. PISTOL

Genuine John M. Browning ammunition, manufactured by world famous makers of Browning Auto-Shotguns. All prices per hundred cartridges. .25 auto (6.35 mm) $3.63—.32 auto (7.65 mm) $4.48—.380 (9 mm court) $4.60—9 mm Luger (Also for P-38's) $6.15. Remit with order. No C.O.D.—f.o.b. Dept. 5-A.

CLAYTON-MORGAN CO. 1351 PENNSYLVANIA AVE., S.E. WASHINGTON 3, D. C.

New Improved—One Application

Minute Man ★ GUN BLUE

Instant "Blue Steel" Gun Finish

Not a Paint—Not a Lacquer

MAGIC COLD CHEMICAL Restores finish on 5 Guns. No heating! Can't injure steel. Simple process. Takes minutes.

$1

GET Free descriptive circular

NEW METHOD MFG. CO.

Arm 32 New Method Bldg., Bradford, Pa.

Semi-finished, Sporter Type
SPRINGFIELD '03
ENFIELD '17
MAUSER M98

STOCKS

- Balanced design
- Precision inletted
- Schnabel tipped fore-end

Special Price
$5.50
POSTPAID

Stock makers of the famous Sheridan Pneumatic offer selected quality walnut sporter stocks. Minimum of work necessary, check piece completely carved; ready for sanding.
Send $5.50 check or money order. Money back if not satisfied upon inspection.

CENTRAL PATTERN WORKS INC.
Dept. 19-H RACINE, WISCONSIN

WEAVER K2.5, GOOD, UNCOATED, $23.00; Excellent, Coated $26.50; New $37.50; K4, VG, Uncoated, $28.00; Excellent, Coated $31.50; New $45.00; K6 Excellent, Coated, $34.50; New $48.50; K6, Rangefinder, Factory condition, $42.00 Alaskan 2½X, Excellent, $45.00; Texan 2½X, Good, $27.50; Excellent $31.75; New $50.00; Bear Cub 2½X Deluxe, excellent $39.00; New $55.00; Saturn 20X, 44MM, V.G., $15.00; Excellent $17.75, Perfect $18.75; New $25.00; Mossberg 20X, Perfect $15.50; Davidson M/218, 22X, Excellent $15.00; Argus Super Grade 20X, VG, $45.00; Excellent $49.50; Perfect $56.00; New $74.50; Unertl 24X Straightline, Excellent $59.50; New $80.00; Unertl Hawk 4X, Excellent $40.00; New $52.00; Unertl 1½", 8x to 20x, Excellent $65.00; New $90.00; Unertl 1¼", 8x to 14X, Excellent $59.00; New $78.00; Unertl 1" —6X, 8X, 10X, Excellent $43.50; New $58.00; Unertl 2"—15X, 20X, Excellent $89.00, New $125.00; Unertl ¾"—6X, Excellent $29.00, New $40.00; Unertl Varmint 8X-10X, Dehorned, Excellent $55.00; New $75.00; Fecker 1¼", 8X-14X, Excellent $55.00; New $75.00; Fecker 1-⅜", 12X, 16X, 20X, Excellent $69.50; New $98.50; Above scopes coated; 12.5, VG, $14.50; Excellent $16.00; New $22.50; 14, VG $17.50; Excellent $19.75; New $27.50; Specify reticule; Stith Master Mount, 1", Mod. 70, Like New $18.00; Redfield Jr. 1", Mod. 70, Like New $11.00; Ashaway Slipcast Reel, Perfect $13.00; Mod. 70 Target .220 Swift, new, $145.00. Late readers write: Trades? by mail only! Jim Armstrong, 805 East Grove, Bloomington, Illinois.

BINOCULAR SUN FILTERS, NEW, U. S. Navy Snap-On type. Eliminates Glare! Only $1.00 pair. You can't afford to be without them. Satisfaction Guaranteed. (Thanks for your binocular orders, fellows. Hope to find time to acknowledge all your enthusiastic replies). D. P. Bushnell, 672-A8 South Lafayette, Los Angeles 5.

COATED LEICA LENSES, 28MM HEKTOR with viewfinder, excellent $110.00; 90mm Elmar perfect $90.00; 135mm Hektor perfect $100.00; Zeiss 50mm f1.5 uncoated Sonnar adapted for Leica, very good $100.00; Imarect finder, good $40.00; Leitz Valoy enlarger, good $30.00; Leitz feather weight Marsept 7x50 coated binoculars perfect $35.00; Zeiss Telita 6x18 Binoculars very good $75.00; Zeiss Tenax I Camera $35.00; Czech Opemus 2¼x2¼ enlarger excellent $50.00. Barr, 116 E. Dale, Colorado Springs, Colo.

PERFECT 3C LEICA, COATED SUMMITAR, Extras, $285.00. Want Rem. 81, 141, Scope, Binoculars. Charles Price, Norwalk, Ohio.

HENSOLDT; 6X42 JAGD DIALYT $80.00. Hensoldt 7x56 Nacht Dialyt $100.00. Both excellent, with case and central focusing, optics perfect. Cameras: Retina I $50.00, Retina II $150.00 with case, both perfect. Myra Oates, 3623 Morehead, El Paso, Texas.

ZEISS 6X ZIELSECHS RIFLESCOPE, coated, perfect, $115.00. Ernest Fumasoli, 5937 Magnolia, Chicago, Illinois.

GUNSMITH'S SERVICES & SUPPLIES

THE PENNSYLVANIA GUNSMITH SCHOOL offers a practical residence Course in Gunsmithing. Day or Evening Classes; G. I. Approved. For free information, visit School or write: 142-A Sixth Street, Pittsburgh 22, Penna.

I DUPLICATE ANY RIFLE OR GUN STOCK ready for hand fitting $5.00. Sand O'Flex sanders $15.00. Sands stock five minutes. Dave W. Thomas, Vineland, N. J.

HUNTERS SPORTSAW

BUTCHER YOUR GAME FAST & CLEAN IN FIELD OR CAMP. SPORTSAW folds and locks to carry safely on belt. Wt-8 oz. L-11 in. Swedish steel blade, birch handle. A "MUST" for big game hunters, freezer owners & home. IDEAL GIFT. At your dealer or direct $3.95
I. C. Thomas & W. E. Edwards Pat. Pend.
(Now in use throughout U.S., Canada & Alaska)
2002 N. GLENOAKS BURBANK, CALIF.

I'LL BET YOU A DOLLAR
that You'll be amazed by the Beautiful Finish

SUPERBA
Puts on Your Gunstocks . . .
MAIL IN $1.00

State color desired: Walnut, Cherry, Clear. Use as directed. If not satisfied . . . BACK WILL GO YOUR DOLLAR. It's wise to order the "Clear" to finish off either color — for finest protection and best results. Only $1.00 the bottle. Better order all three for $3.00. Gun owners and stock makers claim SUPERBA is the most remarkable finish. Stop spending days making the old gun look decent. Let SUPERBA do it in one or two hours.

H. TOM COLLORD, Pres.
PROTECTIVE COATINGS, INC.
Products of Matchless Merit
BOX 3985-AR DETROIT 27, MICH.

TILDEN SUPERIOR MOUNTS

Light, low; very strong, easily dismounted. No loose parts, priced right. For many American and German scopes. Mauser & Win M 70 scope safeties. Scopes mounted, bolts altered, Enfields remodeled. Mounting taps, 6-48, 3 for $1.00; 8-40, 50¢ each. Carbide drills for hard guns, 6-48 and 8-40 size, $1.50 each. Nice 6-48 screws, 25 for $1.00. #1895 powder, 10 lbs., $6.50 packed; 4759, 5 lbs., $5.00 packed. Loading tools, Universal, Pacific & Lyman. Hunting and target scopes, Lyman, Weaver, Unertl and others. Bullets, Sisk 22 cal. $2.25 and $2.80, post-paid. 25, 27 and 30 fine gas check jacketed soft point, $4.00; 25, 27 and 30 fine gas check bullets, $2.00 per hundred, also bullet jackets.
TILDEN MFG. CO., 2750 N. Speer Blvd., Denver, Colo.

BENCH REST SHOOTERS

I have on hand a good supply of Winchester, Pfeifer, Sukalle, & Gregoire barrel blanks. Can guarantee best workmanship and fine accuracy to those shooters interested in a precision rifle for bench work or varmint shooting.
Send for price list on military conversions, general gunsmithing, and money saving arrangement on the purchase and mounting of scopes and accessories.
N. L. PAPERNEK
172 Fetter Ave. • Trenton 10, N. J.

PROMPT SERVICE

Most orders filled same day — immediate explanation if any delay!

TELESCOPE SIGHTS

Big stock of Lyman, Texan, Unertl & Weaver Scopes.

PROMPT INSTALLATION (3-5 days) Redfield, Echo, G & H, Stith, Buehler, Pachmayr & Weaver mounts as well as Lyman and Redfield sights. Bolts altered — First Quality Re-Bluing.

METALLIC SIGHTS

Large Stocks of Lyman #48 $12.50; Redfield #70 $9.50 and #102 $6.50. Popular models in stock by THE GROSS!

RE-LOADING SUPPLIES

Large stocks of Pacific, Universal, Lyman Ideal, B & M Tools, Measures, Scales, Moulds & accessories. Send for FREE "HEADLINER" showing empty cases, bullets, primers, DuPont & Hercules powders.

FIREARMS

RIFLES, SHOT-GUNS, PISTOLS & REVOLVERS—we now are getting so many (and selling so many) it's impossible to list them accurately 6 weeks in advance for this advertising. Send for FREE "HEADLINER" showing hard to get NEW models, real buys in used ones!

SURE WE TRADE!

Write first, tell us what you have and what you want — maybe we can make a deal!

FIFTEEN YEARS of service to shooters everywhere assure you of prompt satisfactory service or your money back! References: Dun & Bradstreet — Nat'l Rifle Ass'n.

DEPENDABLE!

BADGER SHOOTERS SUPPLY
OWEN • WISCONSIN

RIFLE BARRELS • BLANKS FOR GUNSMITHS

Can now furnish the following new calibers; .228", and 6 mm. Using moderately heavy bullets, make flat shooting long range varmint rifles. Also making the 33 Winchester, to re-barrel the old Model 1886 black powder rifles.

Can furnish my regular barrels in various popular twists and long lengths up to 30" subject to slight delay. Regular orders being filled promptly.

J. R. BUHMILLER • *Member American Gunsmiths Guild*
Rifle barrel maker **KALISPELL, MONTANA**

Memo from: **THE PFEIFER RIFLE CO., Inc.** 11252 Penrose St., Roscoe, Calif.

to: The customers who have required us to DOUBLE our production facilities . . . . .

PFEIFER RIFLE BARREL BLANKS are still the **same** glass-smooth products, held to the **same** ultra-rigid dimensional exactness. The **quality** is unchanged—The **guarantee** is unchanged!

PRETURNED or UNTURNED: CALIBERS—.22, .228, .240 (6mm), .25, .256 (6.5mm), .270, 7mm, .30, .32, .35,

ANY SPECIFIED WEIGHT, TWIST: .38 S&W, .375, .38-55, .40, .45 Long Colt, .45 Rifle, .50

PREMIUM GRADE MATCH BARRELS—30" long, gauged and lap-finished to within LESS than 0.0001" variance from Standard groove and bore dimensions. All standard calibers. THERE IS NO FINER BARREL.

ATTENTION GUNSMITHS: Top quality barrels, contoured with **satin-ground** finish, chambered, threaded, headspaced to your customer's action, needing only minimal polishing & bluing to be a deluxe finished product, backed by our full guarantee. No other shop offers so many operations of comparable quality at the price permitted by our volume & heavy modern machinery.

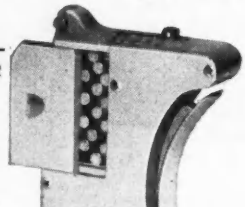
FINEST CUSTOM REBARRELING & RIFLE BUILDING—Heavy bench-rest rifles now setting records in match competition—Super-magnums for the biggest game—superbly accurate varmint rifles.

Barrels in All Weights — Your Choice of Standard or Popular Wildcat Calibers.

SMALL BORE SHOOTERS!

Now A REAL-22LR- CARTRIDGE HOLDER & DISPENSER

Developed for SHOOTERS by a SHOOTER



Pat. Pend.

Attractive, light, ruggedly constructed of aluminum and steel. To operate, DROP in a complete box of shells, SQUEEZE the trigger to EJECT one at a time as needed. The only time you touch a shell is when you put it into your rifle, revolver or clip. A glance at an indicator shows the number of the shell being fired. No firing on the wrong bull. The shells are always protected, no dirt, no spilling, no fumbling. A clip is provided to hang the dispenser on your belt or pocket for offhand or pistol shooting. Set on the ground for prone work.

Price $14.75 Postpaid
Check or Money Order

ARTHUR B. SAUNDERS
Box 74 HOLLIS, N. H.

TERRIFIC DESTRUCTION ON GAME!

This .30 Caliber, 150 grain, type GP SPEER bullet killed a bull elk at 300 yards. .30-'06 load.

That's the reason why every hunting season sees a greater number of big game hunters using SPEER bullets. Properly designed bullets with tough gilding metal jackets, thin in front and heavy at the rear, with cores of SCIENTIFICALLY DETERMINED hardness suitable to the caliber in which the bullets are to be shot, give SPEER bullets maximum effectiveness on big game.

Deep penetration! ***Reliable Expansion.*** ***No Blow Ups!***

VERNON D. SPEER • Lewiston, Idaho

LUGER BARRELS

2, 4, 6, 8 and 12 inch 7.65 and 9mm Chrome Moly Steel 8-groove precision barrels. Special ramp sights. Mr. R. W. Goodman of Boise, Idaho, says ". . . most accurate Luger barrels I have ever owned."

Write for descriptive folder and prices.

DuMOND GUN COMPANY
East Glastonbury • Connecticut

Repairs and Hard Coating for BINOCULARS-TELESCOPES-CAMERAS

Accurate alignment on precision collimator. All work guaranteed. Write or send Glasses and Cameras in for FREE Estimate. Prompt Service. SURPLUS BINOCULAR KITS ASSEMBLED.

EARL'S BINOCULAR SERVICE
925 N. Adams (Golden Valley) Minneapolis 22, Minn.

HOME BULLET MAKERS ATTENTION!

Announcing the **BIEHLER UNIFORM-WEIGHT, CORE-FORMING DIE.** A new refinement in **ultra-precision,** jacketed bullet making. Produces cores with less than 0.1 gr. weight variation, and at the same time performs them to match the inner, tapered contour of the jacket cups in order to eliminate all possibility of imperfect expansion and trapped air in the core seating operation. This tool is a vastly improved version of the one mentioned by Col. Whelen in his article, "Accuracy from the Bench," in the January Rifleman and has been thoroughly tested and approved by members of the Bench Rest Shooters Association. A boon to all bullet makers interested in extreme accuracy, and a "must" in getting the ultimate out of the hollow-point, "soft" swaged bullets which have proved so superior. Immediately available in .22 and .25 cal. Price 22.50. Write for full information.

Precision core seaters and jacket-sizing dies also available. Now under development—a new bullet swage to be announced later.

RAY BIEHLER • 1597 Ridge Road West Rochester 13, N. Y.

HUCKLEBERRY GUN SHOP—HAND MADE stocks, Conversions. Single Shots. All work guaranteed. Douglas Young, Delton, Mich.

PRECISION BARREL FITTING AND Chambering. All popular calibers and barrel wts. speed actions. Bolt handles, trigger guards and trigger pulls altered, ears milled, custom stock work. Ben's Gun Shop, Pleasant Gap, Penna.

ANTIQUE AND MODERN ARMS REPAIRED. Authentic flintlock restorations, also bluing and old style browning. Moderate prices. Send work express prepaid. Kimball Arms Company, Wo burn, Mass.

RIFLE AND GUN STOCK BLANKS IN FOL lowing woods. Birdseye and curly maple., extra fancy Oregon myrtle, American walnut. Ebony and black lucite for fore end tips. Special inletting service to gunsmiths. D. W. Thomas, Box 184, Vineland, N. J.

CUSTOM REBARRELING—BLOCK STOCKing. All Makes. Military Conversions. Rebluing. Frank Le Fever & Sons, Inc., 114 E. Main Street, Frankfort, N. Y.

CUSTOM SPORTER RIFLES, YOUR ACtion or ours. Military conversions, restocking, rebarreling. Atlas Gun Shop, 4104 W. 161 St., Lawndale, Calif.

YOUR JAP 6.5 OR 7.7 CONVERTED TO American calibers—$8.00. Rebarreling. Restocking. Repairing Free gunsmithing catalog. Cougar Arms Co., 141 Michigan St., N. E., Grand Rapids, Michigan.

YOUR 99 SAVAGE CONVERTED TO 300 Enfield to Magnum. Taps to 300. Bayers Gun Shop, Walla Walla, Washington.

SPECIAL! ARTISTIC GUN ENGRAVING AT a reasonable price. Write for illustrated folder. John P. Neu, 4638 Benevides Ave., Oakland, California.

JAP 25 CONVERTED TO 6.5x57 ONE BOX shells included $15.00. Unlimited supply of ammo. Jap. 31 converted to 30-06 $10.00. Bolts lowered $1.50, rear peep sights installed $8.75. Sheerd gold bead front sights installed $3.75. A complete line of gunsmithing. Conversions & Repairs etc. Honan's Gun Shop, 232 San Felipe Ave., Lomita Park, Calif.

STAR BLUING SALTS PERFECTED BY America's Original Gunrebluing, Biltmore, N. C. No thermometer. Gunsmiths Kit $17.00. Finest Bluing—Plating—Pearl grips. Scopes. Trades. Complete Gun service.

PRE-HUNTING SEASON SPECIAL. SPRINGfields, Enfields, polished, blued, stock cut down and refinished $10.00. Satisfaction guaranteed. Bluing only $7.50. Wanted: used Deer rifles, condition immaterial. Life member NRA. Fed. License 10708. Wm. Warga, Gunsmith, 212 So. 77 St., Milwaukee 14, Wisconsin.

GUNSMITH FOR THE PARTICULAR. ENjoy your gun we personally style to your exact wants. Scopes, mounts, sights accurately attached. Bluing, stock work. Custom loaded cartridges you can trust. Kroeckels Custom Loads, Pendleton, Indiana.

SINGLE SET TRIGGERS FOR RIFLES—pamphlet free. Miller Single Trigger Mfg. Co., Millersburg, Pa.

GUNSMITHING ON MODERN AND ANTIque firearms, repairing, restocking, rebluing and browning. Write Charles W. Moore, 12 Franklin Street, Delhi, N. Y.

FOR YOUR ENFIELD

BRAND NEW STOCKS

(Army Surplus) FULLY and CORRECTLY inletted for all U. S. 1917 Rifles. Fine walnut of contrasting grain $2.00. Fancy grain $3.00. Shaping and finishing to Sport Model $4.00 extra. Postpaid in U. S. Discount in case lots to dealers.

YOUR ENFIELD DESERVES A NEW STOCK

B. B. ELLERBECK
42 NINTH EAST SALT LAKE CITY, UTAH

CHRONOGRAPH *New Improved* **WRIST WATCH**

1 YEAR GUARANTEE

Stop Watch — Telemeter — Tachometer Anti-magnetic, shock resistant, unbreakable crystal, stainless steel back, sweep second hand, radium dial, etc. Guaranteed to 1/5 second accuracy! Measures distance by relation between sound and light! Reveals speed of distant airplanes, cars, lathes, etc. IDEAL for sportsmen, broadcasters, physicians, engineers, mechanics, etc. Reduced to only $21.95 plus 10% Federal tax. Sold with Written Guarantee Certificate!

17 JEWEL

UNITED PRODUCTS CO.

7941 S. Halsted, Dept. KCHR-303, Chicago 20, Ill.

GUNSMITHING; REBARRELING IN MOST popular calibers; bolts altered for scope. Rebluing; Jap rifles converted to most calibers. A few fine custom rifles for sale. Laurence Nauman, Douglas, Wyo.

GUNSMITHING; REBARRELING & CHAMbering. Any suitable action. Special heavy barrels for target pistols. The Bolles Sporting Goods Company, 130 E. Sixth St., Cincinnati 2, Ohio.

GUNSMITHING, REMODELING, REBLUING. J. A. Bibey, 122 So. Lincoln, Roseville, California.

ARTISTIC ENGRAVINGS ON FINE GUNS; Game scenes in relief; gold inlay; scroll work, etc. Folder on request. A. Griebel, 4724 No. Keystone Avenue, Chicago 30, Illinois.

CHECKERING IS OUR SPECIALTY. HIgrade, plain or fancy, your design or mine. Long experience. Satisfaction guaranteed. E. R. Briggs, 4555 N. 17th St., Philadelphia, Pa.

"SPECIAL." INLETTED AND SHAPED RIfle blanks. Hard Maple slightly figured. American Walnut. $5.00 each. Any rifle. D. W. Thomas, Vineland, N. J.

MILITARY TO SPORTER CONVERSIONS. We do the complete job in our new modern shop. Jones-Clayton Gunsmiths, 2722 Main Street, Joplin, Missouri.

HORN BUTT PLATES AND GRIP CAPS. R. Vail, Warwick, N. Y.

CHECKERING TOOLS, HAND FILED, SET of three: Checker, Border and Cleaner, also directions. Popular 16 line set $2.75; 18 or 20 line $3.50, postpaid. Thousands of satisfied users sold last 15 years. Free catalogue. Warner Products Co., Dept. R, Baldwinsville, N. Y.

ALUMINUM SCREW IN DUST CAPS FOR Lexan scopes $2.00 pr. Johnson's Gunsmith Shop, Hot Springs, So. Dak., Box 751.

IMMEDIATE DELIVERY, NEW GUNS, RIfles, handarms, scopes, binoculars, ammunition. Discount to dealers, stamp for list. Closing out Mod. 94, 25/35 box ammunition $52.95, Marlin 30/30 $55.00, Ithaca shotgun, rib, $85.00. Overly's Gun Rack, Ephrata, Penna.

EXPERT GUN STOCK MAKER. COMPLETE Rocking "Handinletting" Stocks to suit your requirements. Rifle. Shotgun. Pistol. Dealer Discount. Paul Jaeger, 884 Mill Street, Feeding Hills, Mass.

AUGUST SPECIAL, MILITARY CONVERsions and custom sporters. J. L. Lyden, 1516 Chelton, Pittsburgh 26, Pa.

.30 CALIBER BULLET DIES $32.50. 1½ TON Hydraulic Press $27.50. 3 ton $32.50. Gilding Metal Cups $12.00 per 1000. All F.O.B. Johnson's, 9010 E. Slauson, Rivera, Calif.

COLT SINGLE ACTIONS REPAIRED, REmodeled to 38 special 22 cal. sporter rifles built to order. Bill Kirsh, Gunsmith, 1284 Sunset, Ukiah, Cal.

I AM NOW TOOLED UP TO LOAD ALL 22 Centerfires including most 22 wildcats. Send for price list. L. Shelton, M/S Retired, Iowa Park, Texas.

FECKER SCOPES

always available

write for catalog to

J. W. FECKER, Inc.

2016 Perrysville Ave. Pittsburgh 14, Pa.

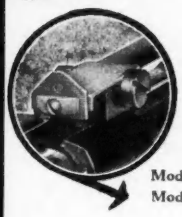
IMMEDIATE DELIVERY

Custom built .270 by Amrine and Overly, Marysville, Ohio. K2.5 — BUEHLER EQUIPMENT

BUEHLER EQUIPMENT

Mounts	$15.00
Safetys	6.00
Little Blue Peep	3.35
Bolt Bending Blocks	15.00
Special Gun Screws	

Postpaid with Remittance. If Dealer Cannot Supply, Order Direct.



"LITTLE BLUE PEEP"

A convenient auxiliary iron sight to replace a damaged scope. On or off in a jiffy *without disturbing scope zeroing.* Carry one in your watch pocket (weighs ½ oz.) and be prepared.

Model B for *Buehler* mounts
Model R for *Redfield* mounts

Send for NEW FOLDER. DEALERS, GUNSMITHS write for our attractive proposition.

Distributed in Canada by
WESTERN SCOPE SERVICE
Calgary, Canada

MAYNARD P. BUEHLER
697 Vernon St., Oakland 10, Cal.

Six Reasons Why

MICRO SIGHTS

IMPROVE YOUR SCORES

6

1- Positive Locking
2- Click Adjustment in Windage and Elevation
3- Sharper Definition

6

Higher -4 Sighting Radius

Deep -5 Notch

Eliminates-6 Glare

NOW AVAILABLE FOR ALMOST ALL TARGET PISTOLS—Write for new catalogue of Micro sights & improvements for Pistols. PISTOL AND REVOLVER SPECIALISTS. Short Actions—Offset and Wide Hammers. Accuracy Jobs.

MICRO FEATURES

the ADAMS SCOPE DOT. Tested and approved by Western Shooters for years. All popular scopes are available with ADAMS DOT for immediate delivery. Dealer inquiries welcomed.
WEAVER K AND J MODELS 330 AND 440 ..... $ 8.00
LYMAN, CHALLENGER, ALASKAN, TEXAN, NOSKE, AND MOST FOREIGN SCOPES $12.50

MICRO SIGHT CO. • 5813 MISSION STREET • SAN FRANCISCO 25, CALIF.

ARE YOUR GUNS WORTH $4.00 TO YOU?

SEE PAGE 96

PRIDE PRECISION RIFLE BARRELS

Offer you SUPERIOR ACCURACY with LONG LIFE—the PROVED result of careful manufacturing methods & better quality barrel steel. BLANKS—preturned, finished turned, or ground; BARRELS—fitted & finished; and RIFLES—Lightweight, GUARANTEED Accurate, built on new F. N. actions.

RALPH F. PRIDE • 10140 S. E. Market St.
PORTLAND 16, OREGON

Would You Believe It? **POWER TOOLS**

Only $8.00 Each!

5 Big Capacity power tools in ONE machine: Lathe, Drill Press, Saw Arbor, Grinder and Sander—uses ¼ to ½ H.P. motor. Equals in performance equipment costing up to 8 TIMES MORE. Factory-to-you, only $39.95 cash, or on Easy Payment Plan. 10-day FREE trial. Money-Back Guarantee. Write for FREE Catalog.

MONEY-MAKING HOME HOBBY

10-DAY FREE TRIAL

EMRICK, INC., 1891 Clinton, Kalamazoo, Mich.

NATL RIFLE ASSN NRA BUSTIBLE BULLSEYE

Bustible Bullseyes

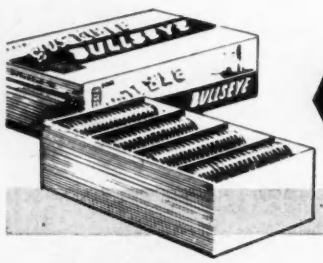
. . . Already More than 2,500,000 Bustible Bullseyes have been ordered—and reordered—by sporting goods dealers. The National Rifle Association is boosting the use of these new targets among its members and clubs for novelty events and plinking. Targets will break when hit by any .22 rifle or pistol, or pellets from rubber band or air guns.

If your dealer cannot furnish them, order direct from us.

SHATTERS ON IMPACT

SPECTATOR APPEAL

EASY & QUICK TO HANG



$7.50 per 1000

GENEROUS DEALER DISCOUNT

NATIONAL TARGET COMPANY
1255 Twenty-Fifth St., N. W. Washington 7, D. C.

CUSTOM GUNSMITHING

TOP QUALITY — PROMPT SERVICE

- **CONVERSIONS**—Enfields, Springfields and Mausers converted to the finest sporting rifles with faithful attention to details of your specifications.
- **SCOPE MOUNTING**—We are expert in this work. Our jobs are CORRECTLY mounted.
- **POLY CHOKES**—2 day service. Regular Poly $14.75, Ventilated Poly $18.75 installed. Returned prepaid. Send barrel only stating over-all length desired. As agents for the Poly Choke Co., we make these installations in our own shop.
- **REPAIRS**—Complete repair, overhaul and rebluing service on rifles and shotguns for the hunter, target shooter, skeet or trap shooter. Methods and standards of workmanship are maintained as practiced by the better arms manufacturers. We are authorized by the Remington Arms Co. and the Winchester Repeating Arms Co. for UNLIMITED REPAIRS on guns of their make.
- **CUSTOM RESTOCKING**—Rifle and Shotgun restocking that will please you. Top quality work only.

All work advertised is done in our shop. We do no farming out. Send for Price List G

Freer & Kent, Gunsmiths

THURMAN RANDLE & CO. ● 208 N. AKARD ST. DALLAS 1, TEXAS

SAVE UP TO 50% THE WORLD'S Greatest VALUES in BINOCULARS

EZ2SS TYPE, BRAND NEW, DELUXE LEATHER CASE INCLUDED. Built to rigid military specifications. Never before at these prices!

OFFER IS LIMITED!

6 x 25	$24.00	with Coated Optics $40.00
8 x 30	30.00	with Coated Optics 36.00
7 x 50	40.00	with Coated Optics 48.00
10 x 50	52.00	with Coated Optics 62.00

Add 20% Fed Tax Postage Included

Sun Filters $1.00 (U. S. Navy) Eliminates Glare

ORDER TODAY! Send check or Money order. $2.00 Deposit on COD's MONEY-BACK GUARANTEE! Free Booklet "HOW TO SELECT BINOCULARS"

SIX POWER **Pocket Binocular**

WITH DELUXE LEATHER CASE. LIGHT ● COMPACT ● TAKE IT EVERYWHERE - 6 x 15 with COATED OPTICS. Weighs only 4 ounces! Size: 2 x 3¼ inches. A high quality prism binocular (German design) with precision ground achromatic lenses. Field of view 370 feet at 1000 yards.

MADE TO SELL FOR $30.00 ORDER TODAY! *Only $18.00...* with Coated Optics $22.00

BUSHNELL IMPORTERS 672-A1 S. Lafayette, Los Angeles 5, Cal.

SINGLE ACTION COLTS CONVERTED TO .38 Special $21.50; .32-20 converted to .38 Special and .357 Magnum $17.50; rebluing $7.50 extra; 1917 Colts converted to .38 Special $27.50. Rechamber to .45 Colt $5.00. S. A. bolts $3.00. McCown Repair Service, 218 So. Main, Jacksonville, Texas.

"POP" EIMER, JOPLIN, MISSOURI. REvolvers, .22 to .357 Rifle rebarreling. Proofing.

COMPLETE COLD RUSTING BLUING INstructions with sufficient solution for five guns $1.00. G-Way Products, 828 Swift, Sheboygan, Wisc.

ENFIELDS CHANGED TO 300 MAGNUM. Bolt and magazine altered, $20.00. Albert M. Romberger, Cressona, Penna.

.22 LUGER CONVERSION $45.00. MALCOLM I. Hill, Southern Pines, N. C.

AM STILL MAKING STOCKS AND FITTING barrels promptly, reasonably. Frank Curatti, Black Lick, Pa.

LOOK AT THESE SUMMER PRICES. ENfield ears off $3.50, speed action $5.00, guards straightened $1.75, shorten & crown barrels $1.50, blue $8.00, completed stocks $20.00 up, alter bolts $5.00, scopes mounted free if bought here. Engine polish bolts $4.50, alter 16 ga. to 2¾" chamber $3.50. Barrel list 3c. Jap 25 hunting ammo $3.85, 31 Jap $3.50. 30-06 $2.90. 8MM full loads $3.25. (Dealer discounts). T-P Shop, West Branch, Mich.

MASTODON IVORY, SMALL PIECES FOR inlays $3.50 pound P. P., U.S. Peep Sight Gun Shop, 313 E. Champion, Bellingham, Wash.

SPECIAL: YOUR ENFIELD BARREL FITted and properly finish—chambered and headspaced in .30-06 to Enfield, Springfield or Mauser receivers—$7.50, to .30-40 in Krags—$10.00. Send for list. Dale M. Guise, (Gunsmith) Gardners, Route 2, Penna.

GENERAL GUNSMITHING; REMODELING of military rifles into fine Sporters, tool steel service. H. C. Rustad, Mount Marion, N. Y.

MILITARY CONVERSIONS, REBARRELing, bluing, general gunsmithing. John Custer Gun Works, 928 13th Ave., So., St. Cloud, Minn.

CHAMBERING AND BARREL FITTING FOR the Lindahl Chuckers and most calibers on suitable actions. Enfield Ears Milled off. Straight Trigger Guards. Barrels cut and Crowned. Headspace corrected Enfields and Springfields. Bbl. altering. Bluing. Scopes, Mounts, Sights, and precision installation. David G. Poyer, 2520 W. Koenig, Grand Island, Nebraska.

STOCKS, BLANKS, WALNUT, BIRDSEYE, myrtle, scopes, sights, ramps, swivels, slings, conversion work, re-stocking, write to Gunsmith, 38 N. E. Sandy Blvd. Portland 13, Oregon.

EXPERT GUN REBLUING. BOLTS POlished and engine turned. Bob Leipold, Mt. Carmel, Ill., R. R. 4.

JAP RIFLES ALTERED TO HANDLE AMErican Ammunition. Custom Guns. Target Rifle. Jim Winton, Cherry Grove, Oregon.

AMMUNITION CUSTOM LOADS. SPECIALizing in Japanese 7.7 (31-cal). 150 & 180 gr. M & G S.P. Also 30-06 150 & 180 Gr. S. M & G. Price—Jap $4.50 Box. Discount to Dealers. L. M. Coates, Custom Loader, 1422 East Union Street, Seattle 22, Washington.

SHOOTING GLASSES

HUNTING—FISHING DRIVING—FLYING

Worn by America's Leading Shooters

30-day Trial. Also ground to your prescription. Write for booklet.

$3.75 to $15.00

W. N. BELZ, INC., Opticians, 2 E. 44th St., New York
Specialists in Fitting Shooting Glasses

SCOPES

LEUPOLD RIFLESCOPE ..... $ 57.50
WEAVER K-6 SCOPES 48.50
WEAVER K-4 SCOPES 45.00
WEAVER K-2.5 SCOPES 37.50
WEAVER J-4 SCOPES 27.50
WEAVER J-2.5 SCOPES 22.50
WEAVER G-6 SCOPES 12.50
WEAVER G-4 SCOPES 9.75
LYMAN CHALLENGER, 4 power 85.00
LYMAN ALASKAN SCOPES 60.00
Lyman Jr. Targetspot 6, 8, 10X 62.50
Lyman Super Targetspot 10, 12, 15, 20X 90.00
UNERTL "Falcon," 2¾X 48.00
UNERTL "Hawk," 4 power 52.00
UNERTL "Condor," 6 power 66.00
UNERTL 1" Obj. Target scopes 58.00
UNERTL 1¼" Obj. Target scopes 78.00
UNERTL 1½" Obj. Target scopes 90.00
UNERTL 2" Obj. Target scopes 125.00
Lonsoldt "dural" Dialytan 4X 86.00
Lonsoldt Dialytan 4X 77.00

OBSERVATION SCOPES

B & L 60 mm. 20 power 95.00
Argus 20-power 74.50
Saturn 20-power 25.00
Davidson Mark 245, 20X 84.50
Extra eyepieces 15, 25, 30 & 40X 15.00
Mark 245 bipod stand 15.75
O'Dell's Scope Mount for pistol cases 4.50

SCOPE MOUNTS

Echo ..... $12.50 to 17.50
Griffin & Howe 19.50
Redfield Jr. ..... from $12.50 to 19.50
Buehler 15.00
Tilden 16.50
BUTTS COMPENSATORS 14.85
(with choice of any tube)
Additional tubes, each 2.95

POLY CHOKES
(Installed) 18.75
Note: Send barrel only

POW-er PAC—3 tubes, belt, carrying case and wrench 18.50

WILSON SHELL TRIMMER

Complete with 1 shell holder and burring tool $12.00
Primer pocket reamer ..... $ 4.50
Inside neck reamer ..... $ 5.50
Cartridge case gauges in following calibers: .220 S, .257 R, .270 and 30.06 ..... each $ 4.50
Punch and base sets for removing crimped-in primers (.30 cal. only) ..... $ 2.00

REDDING POWDER & BULLET SCALE

Capacity 325 grains. Tenth grain accuracy with tenth grain over and under graduations. Clearly graduated beam with self-aligning bearings. No weights required $11.95

Lown and Sharpe #980 Powder Scale $35.00

JACKETED BULLETS

Prices per 100

SIERRA

.224 H.V. 45, 50, 55 gr. Spitzer S.P. $2.75
.224 H.V. 45, 50, 55 gr. Round nose S.P. 2.75
.223 or .224, 40, 45 gr. Hornet S.P. 2.25
.257 cal. (87 gr. H.V., $3.75), (100 gr. H.V., $3.85), 117 gr. H.V.... 4.00
30 cal. (125 gr., $4.00), (150 gr., $4.50), 180 gr. 4.75

MOFFAT SPECIAL—45, 50, 55 gr. M.V. (3600 F.S.) Spitzer S.P. Reg. $2.50, NOW $1.99

SPEER

.257 cal. 87 gr., $3.75. 100, 120 gr. 4.00
.270 cal. 100 gr., $4.25. 130 gr. .. 4.50
.30 cal. 110 gr., $4.25. 180 gr. ... 4.75
.35 cal. 250 gr. (box of 50) 2.88

SISK

.224 cal. Express 49, 55 ..... 2.80

NEW SAECO MELTING FURNACE

Automatic, thermostatic control with adjustable heat range! 11 lb. capacity. Draws 1,000 watts.

$28.50
INCLUDING
ONE INGOT MOULD

CRAMER LUBRI-SIZER

Cast of Meehanite. Ideal for hard bullet metals such as Type metal or Kirksite A. Grease reservoir operates under 300 lbs. pressure, enabling user to size many bullets with one pressure setting (approx. 35 bullets of .38 cal.). All dies are hardened, inside surfaces micro-finished. $17.50
With gas check seater $20.00

PFEIFER BARREL BLANKS

UNTURNED OR PRETURNED

Immediate delivery on unturned barrels in .224, .257, .270, 7 mm and .30 cal. Furnished preturned in 3 sizes to give muzzle dimensions of .650, .750 and .890; 28 in. long at additional $3.00 each. Calibers 22, 25, 270, 7 mm, 30, 35 and 375 are considered standard, $21.50

PACIFIC TOOLS

Super, complete for one caliber $38.75
Standard, complete for one cal. 31.50
Sizing and seating dies with crimp 13.50
Shell holders (except .22 Hornet) 3.85
Auto primer feeds (Super) 5.50
Extra primer feed tubes 2.25
Powder funnels .22, .25 and .30 cal. ..... .75

BARRELED ACTIONS SPECIAL PRICES!

Complete, ready for stock

98 Mauser with 24" Sporter barrel, Lyman ramp, blued complete. .257, .270, 30/06. Reg. $97.50, NOW $65.00

1903 Springfield 24" Sporter barrel, blued, no sights, nickel steel. Reg. $65.00, NOW 45.00

MICRO-MOVEMENT TRIGGERS
Mauser, Spring, Enfield $15.00

SAECO TRU-SPEED PRECISION POWDER MEASURE

Adjustable Rifle Model $14.50
Adjustable Pistol Model $14.50
Extra Drum to Combine Above..$4.00
Bench Stand...$3.25

SEND FOR PRICE LISTS

Latest price information on all loading equipment, gun supplies and accessories are now available.

GUN INQUIRIES INVITED

We carry the largest stock of new guns on the West Coast. Write about any type in which you are interested. Retail only.

All prices F.O.B. Beverly Hills
In Calif. add 2½% Sales Tax

Discount to dealers and gunsmiths

KERR'S

The BEST of Everything for the Sportsman
9582 Wilshire Blvd., Beverly Hills
CALIFORNIA

JAP RIFLES RECHAMBERED TO 30-06 $10.00 or 300 Savage $15.00. Bend bolt, measure bore, test fire and send you fired cases. One week service on 30-06. Albert M. Romberger, Pessona, Penna.

CUSTOM REBARRELING, BUHMILLER Banks only. Calibers, 300 H&H, 30/06, 30/40, 220, .257, .250 Sav., .220 Swift, 22/250 Standard Hornet, also .22 L.R. Match Grade barrels. Bolt handle alterations, unfitted finish—chambered barrels, can also furnish unchambered finish-turned barrels. Write for further information. Rust process bluing. Kenneth L. Hooper, Pareka, Montana.

QUICK WAY BULLET PULLER $6.00 SET Pulls all rifle bullets, .22 to 35 cal. For Pacific or Universal tools. Money back guarantee. See March Pope bag. Now sold by M. L. Whitesell, 1131 North Lincoln, Casper, Wyo.

GENERAL AND CUSTOM GUNSMITHING. Rebarreling, bolts altered, sights, scopes mounted. Hi-Blaking. Jim Townsend, 915 East 9th. St., Clark, Nebraska.

DELUXE GUNMAKING FOR THOSE WHO demand the best. Rifles made in 26 popular standard and wildcat calibers. Accuracy guaranteed in bench rest and match rifles. Stoner Arms, Attica, Ohio.

NEW BENCH CLAMP FOR SAECO POWDER measure owners. Three position clamping. $3.25 postpaid. Miller Gun Shop, Olean, N. Y.

MILITARY CONVERSION, REBARRELING Buhmiller chrommoly ground finish fitted to your action ready for bluing $34.00. Custom restocking, Bishop stocks $28.00. Military rifles blued—are ground smooth before bluing. No tool marks left $10.00. Folder free. Messicks Gun Shop, Dundee, Ill.

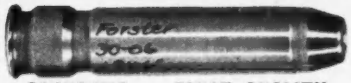
CUSTOM GUNSTOCKING. INLAYS. CHECKering. "Dreamguns." Commendation from top authorities. Ervin King, 140 Portage, Kalamazoo, Mich.

HARRY C. WHITE, GUNSMITH. REPAIRing any type or make. Rebarreling .22 Long Rifle, Hornet, 30-06, 938 W. Main, Greenfield, Indiana.

LONG RANGE 25 SNIPER $38.00; 22 SNIPER $43.00 (sample cartridge 25¢). Rebarreling, reforming bolts for scopes, bluing, stocking. Davis Engineering Works, Grand Island, Neb.

ATTENTION VARMINT HUNTERS. LET US convert your DCM treasure to a high intensity small bore rifle. Swift, 22/250, 219 Donaldson Wasp, 257 improved. 270 & 250 magnum rifles made to order, $35.00 and up. Miser magnum conversion $14.00. Japs rebarreled in white $25.00. Any rebarreled job, polished and blued free during August. This season help yourself by helping us, send us your rifle now. K2.5's like new $30.00, limited supply. 3¢ stamp brings list of rifles, shotguns and accessories for sale. The Gun Shop, 110½ Broadway No., Seattle 2, Wash.

HEADSPACE GAUGES



ACCURATE, — FIRST QUALITY

Made of one piece solid steel, hardened, precision ground and lapped. Available in "go", "no-go" and "field" lengths, in cals. 30-'06; .270; 8mm; .257 Rob; 7mm; 300 Sav; .250 Sav; 220 Swift and 22-250 at $3.75 each gauge or any three for $10.00, postpaid. Cals. 300 Mag; 30-40 Krag; .219 Zipper; .218 Bee and 22 Hornet $2.75 each or any four for $10.00. Immediate delivery. BE SAFE. CHECK THAT "UNSERVICEABLE" RIFLE and BE SURE!

STOCK INLETTING GUIDE SCREWS

for Springfield-Krag; Mauser; Enfield-Rem. 720; Win. 70; Win.-54; Rem. 721—722. 50¢ each or any three for $1.00, postpaid.

GUARD SCREWS

for Springfield, Enfield (std. or straight guard), Krag and Mauser, 60¢ a pair. Lock screw type for Mauser (4 screws), $1.25, post paid.
6-48 FILLISTER HEAD SCREWS, hardened and color cased, available in ¼"; 5/16"; ⅜" and ½" lengths, 60¢ per dozen, any assortment, postpaid.

Write for Free Literature.

FORSTER BROTHERS, Lanark, Ill.

"Trader Max" says
NEW GUNS Now!
Winchester, Remington, Ithaca, Browning, S&W, Colt—write me your wants today! 500 used GUNS! We trade Guns, Binocs, scopes, etc.
24 Years of Service
Finks
"Famous for Sports"
WILLIAMSPORT, PA.

◀ SHOOTERS' SUPPLIES ▶
Rifles and Pistols—Reloading Supplies—Pacific and Hollywood Loading Tools and Dies—Sisk, Moffat, Wotkyns-Morse, Sierra, Speer and Norma Bullets — Powder and Primers — Conversion Parts—Scopes, Mounts, Binoculars—Barrel Service and Stocks.
Mail orders are invited—
Send for free price list.
ROBERT S. THOMAS Fone SL. 9259
8616 Georgia Ave., Silver Spring, Md.

From TYRO to MASTER
ABC OF PISTOL SHOOTING
AMERICAN SIGHTING SCOPES
THE ABC OF RELOADING
Remodeling MILITARY RIFLES
5 NRA Manuals
- FROM TYRO TO MASTER Rifle fundamentals
- ABC OF PISTOL SHOOTING Handgun fundamentals
- AMERICAN SIGHTING SCOPES All about telescopic sights
- THE ABC OF RELOADING A primer on Handloading
- REMODELING MILITARY RIFLES Another "how to do it" Manual

Price 25¢ each or 5 manuals for $1.00
NRA Book Service
1600 Rhode Island Ave. N. W. • Washington 6, D. C.

ASHURST RIFLE BARRELS FOR THE GUNsmith, best heat treated Chrome Moly, or Carbon Manganese, calibers .22 to .375, any desired twist, either left or right hand, six grooves. Chrome Moly barrels $17.50, Carbon Manganese $15.00. Dealers investigate our prices for barrels fitted to your Mauser Actions. Complete conversions by Fred F. Wells. Richards Sport Store, 514 W. Gurley, Prescott, Arizona.

CONVERSION WORK. 7.7 JAP (.31) TO 300 Sav. $15.00. .32-40 to .32 special $10.00. Orahood Gun Shop, Ordway, Colo.

REBARRELING TO BOLT AND SINGLE shot actions. All popular calibers. Immediate delivery. Discounts to Gunsmiths and Dealers. Bolts altered for low scopes, no welding. Life member. C. E. Bryant, 818 Sherwood Rd., Charleston, W. Va.

RIFLEMAN-HUNTER. GUNSMITH. MILItary Conversions and General Gunsmithing. Fred Herrick, Seeley Lake, Montana.

BLUEPRINTS YOU CAN FOLLOW, SHOW how to convert your Jap rifle, $2.50, also detailed bulletin as to the what and how. Send $2.50 money order. We make Japs into good hunting rifles or tell you how. We build 6.5 Roberts, 300 Savage, .06 or other calibers from Japs, $7.50-$50.00. Minimum job $8.50. The Gun Shop, 110½ Broadway No., Seattle 2, Wash.

GENERAL GUNSMITHING, REBARRELING, restocking, bluing. Walter Glodzik, 247 South 6th St., Reading, Penna.

YOUR MAUSER, SPRINGFIELD OR EN field rebarreled and blued complete using Johnson Chrome moly barrels to any popular caliber $35.00. Buhmiller barrels turned to your dimensions fitted at extra cost. Johnson barrels fitted to Jap actions in white $35.00. Your single shot action rebarreled to 22 Hornet, 22 K Hornet, 2R Lovell, 218 Bee or 219 Donaldson. Write for prices. 8 MM or 30/06 changed to 8 MM/06 or 30/06 Improved $12.50. Bolts altered $7.50. Rifles reblued $10.00. F. N. Mausers fitted with Johnson barrels in white $75.00, blued $80.00. Immediate delivery. We carry a complete line of sights, hunting and target scopes and reloading equipment. All barrel jobs proof-tested and all work guaranteed. Delivery on above services 10 to 15 days. Send parcels to Valley Gun Shop, R.D. #1, Zelienople, Pa.

TOO LATE TO CLASSIFY

FOR SALE: GUN SHOP, DOING EXCELlent Business. Poor Health Necessitates Selling. Grieser Gun Shop, Firth, Nebraska.

SCOPE BLOCK SCREWS, HEADS FULL size, true with body—A.B.C. or D. Six for 40 cents—state length. Discount for quantity. Farris, Box 439, Portsmouth, Ohio.

U. S. SPRINGFIELD ARMORY, CAL. 22 LR. Perfect, super-accurate target rifle, custom deluxe sporter stock, checkered grip and forend, cheek piece, Dahl ramp front, folding open rear on ramp, weight 8½ lbs., $115.00 postpaid; or C.O.D. Smith & Wesson post-war K-22 like new, fired 250 rounds, $55.00. Both for $165.00. R. Hammersmith, 739 N. 2nd St., Milwaukee 3, Wis.

FANCY ENGRAVED GERMAN .257 ROBERTS Mauser, Ribbed bbl. Excellent $250.00. Grieser Gun Shop, Firth, Nebraska.

WINCHESTER 70, .257 STANDARD, 94 CARbine 30-30. Winchester Remington Trap Guns, Savage 99, 300 Cal. All new factory grease, list prices. Dehner's Sports Dept., Burlington, Iowa.

FANCY ENGRAVED 8 MM MAUSER, Ribbed bbl., 4½ Power Precision Scope. Grieser Gun Shop, Firth, Nebraska.

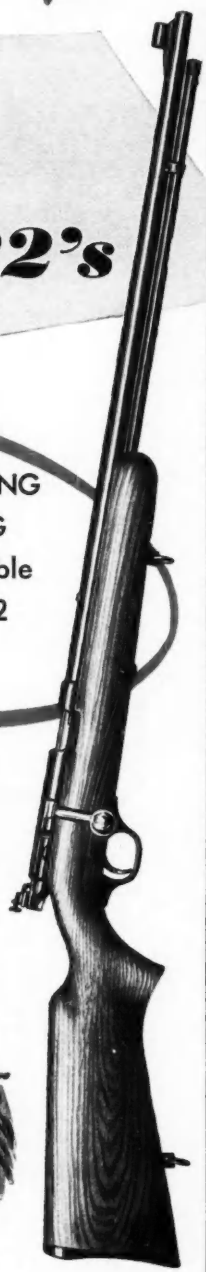
ARE YOUR GUNS WORTH $4.00 TO YOU?
Then keep in the fight against restrictive gun legislation. Be an NRA member and American Rifleman reader.
I enclose remittance of
☐ $10.00 for 3 years
☐ $7.00 for 2 years
☐ $4.00 for 1 year
(PLEASE PRINT)
Name
Age
Address
City
Zone
State
☐ This is a RENEWAL of my membership expiring
(month-year)
☐ This is a NEW MEMBERSHIP Endorsed by:
Endorser
Address
☐ NRA Member
☐ Public official, including U. S. Armed Forces Officers.
I certify that I am a citizen of the United States; that I am not a member of any organization which has as any part of its program the attempt to overthrow the government of the United States by force or violence; that I have never been convicted of a crime of violence, and that if admitted to membership I will fulfill the obligations of good sportsmanship and good citizenship.
SIGNATURE
NATIONAL RIFLE ASSOCIATION
1600 RHODE ISLAND AVENUE, N. W., WASHINGTON 6, D. C.

What's Your choice?

of these sturdy, dependable

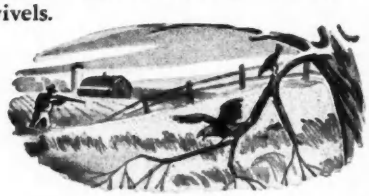
Low-Cost Marlin .22's

A FULL DAY'S HUNTING
ON ONE LOADING
with Marlin's dependable
Tubular Magazine .22
18-25 shots



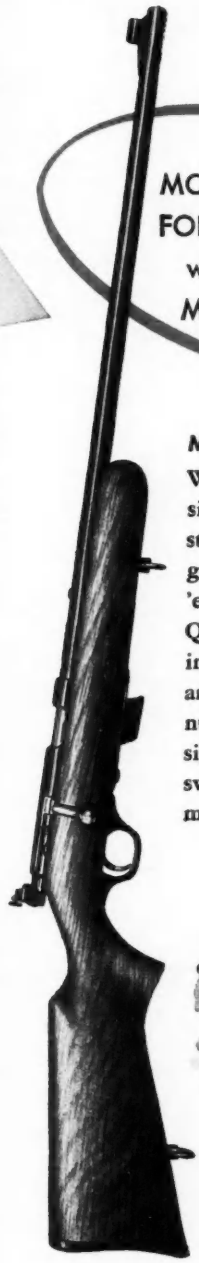
MARLIN MODEL 81-DL

Shooting efficiency, with *least* fuss and bother! Magazine holds a load for a full day's hunting. Patented non-jamming feed. Shoots .22 short, long and long rifle cartridges—regular and high speed without adjustment. Quick-release trigger—self-cocking action—side ejection—Off and On safety—American walnut stock. Available with peep sight or open sights; sling strap swivels.



Unbeatable for pests and vermin...owls, rats, hawks and crows, the 81-DL carries up to 25 shots.

MORE SPORT
FOR YOUR MONEY
with Marlin's Clip
Magazine Repeater



MARLIN MODEL 80-DL

Whale of a value—this man-sized .22 repeater! Ready for instant action on vermin or small game. 8 rapid-fire shots to get 'em, no matter how fast they run. Quick-release trigger—self-cocking action—side ejection—Off and On safety—American walnut stock. Available with peep sight or open sights; sling strap swivels. More sport for your money with Marlin's 80-DL!

Marlin's 80-DL is a sure getter of woodchuck, raccoons, rabbits and other fur-bearing game.

BOYS! Be a ranger. Write Sportsmen's Service Bureau, 343 Lexington Ave., New York, for FREE booklet.

THE MARLIN FIREARMS CO. · NEW HAVEN, CONN. *Fine Guns Since 1870*

Marlin Guns

SEND FOR NEW, handsomely illustrated catalog with complete specifications. Enclose three 3¢ stamps to cover postage and handling. Mail coupon to Marlin, Dept. 3, New Haven, Conn.

Name.....

Street.....

City.....*State*.....

YOU'LL NEED EVERY POINT

TO WIN AT THE NATIONALS

Shooting against the best the country has to offer—you'll need every advantage SUPER-MATCH can give to back up your own good shooting skill.

The Nationals at Des Moines and Ft. Sheridan will attract as tough competition as you will encounter. To meet the challenge of top marksmen, well trained and superbly equipped, you may demand and expect the accuracy and uniformity SUPER-MATCH Mark II delivers more consistently than any other cartridge.

Aggregate winners at rifle and pistol tournaments, week after week, have proved that the performance of Mark II is equal to their own ability to WIN.

Don't be upset—GET SET with SUPER-MATCH!

Western
TRADE-MARK

DIVISION OF OLIN INDUSTRIES INC.

SUPER MATCH

THE *SUPERIOR* MATCH AMMUNITION

Western Cartridge Company, Division of Olin Industries, Inc., East Alton, Illinois